بسم الله الرحمن الرحيم

طريقة الإمتحان بتكون ٢٠ سؤال ثلاثة أسئلة ماعدا ال PELVIS سؤالين فقط.

بالنسبة لل UPPERو ال LOWER:

سؤال MUSCLE

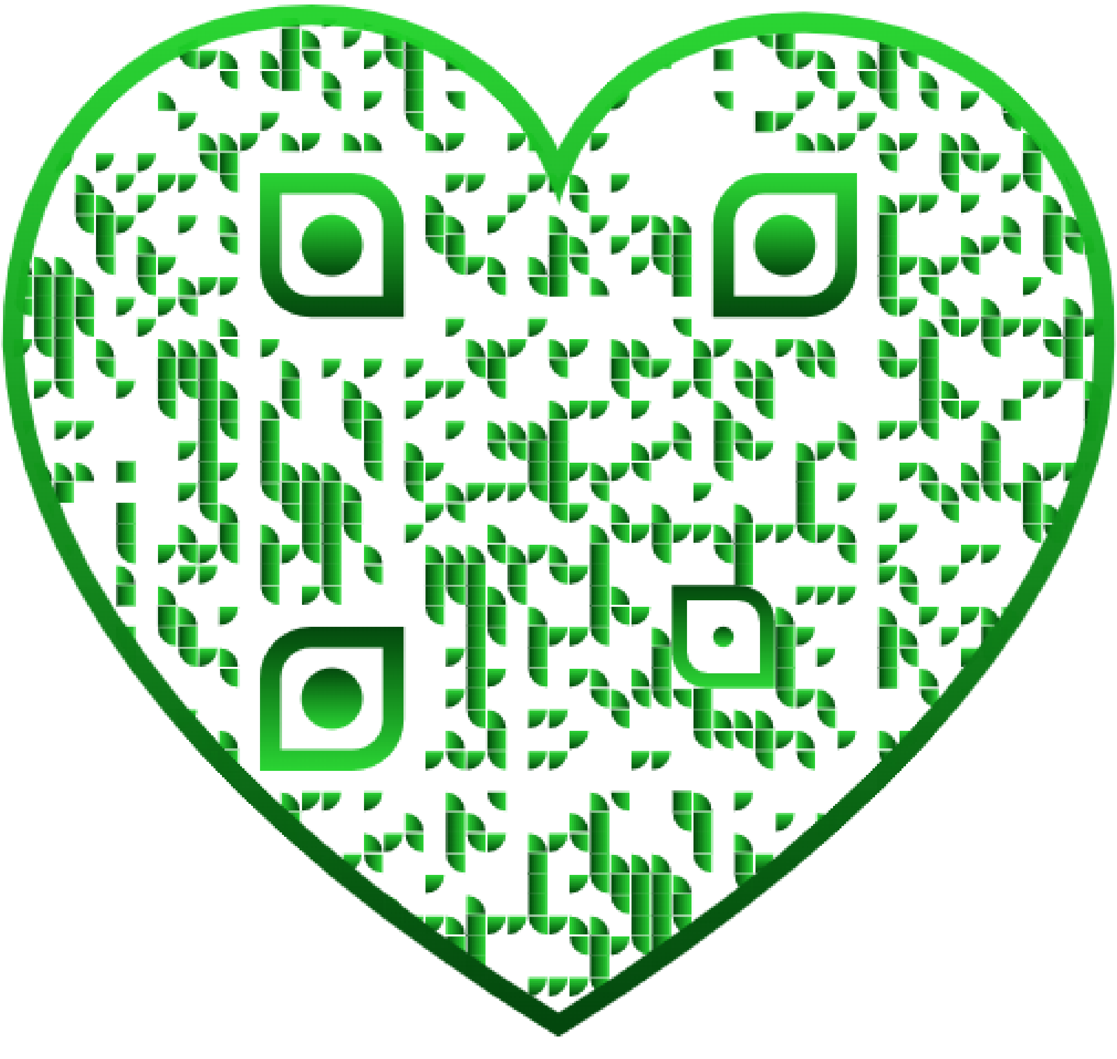
سؤال STRUCTURE (NERVE .VESSELS)

سؤال BONE مع التركيز على الATTACHMENT

(قد يكون هناك أخطاء فليس كل شئء صحيح لأن عمل هذا العرض كان في فترة قصيرة)

ونرجو دعوتكم لنا بالتوفيق والنجاح

الصور من كتاب
Color atlas



THORAX

Bones in thorax:

ribs(costae)

CLASSIFICATION OF THE RIBS ACCORDING TO THEIR RELATION TO THE VERTEBRAL COLUMN:

1)typical ribs from 3 to 9 the posterior end of them articulates with 2thoracic vertebrae &the intervertebral disc in between

2)non_typical ribs :1\2\10\11\12:
the head of each non typical rib articulates with the vertebra of the same number with the exception of the second rib articulates with 2 vertebrae(T1\T2).

SECOND RIB CONSIDERED NON TYPICAL BECAUSE IT IS SHAFT DIFFERS FROM THAT OF THE TYPICAL RIBS

TYPICAL RIB HAS 3 PARTS:

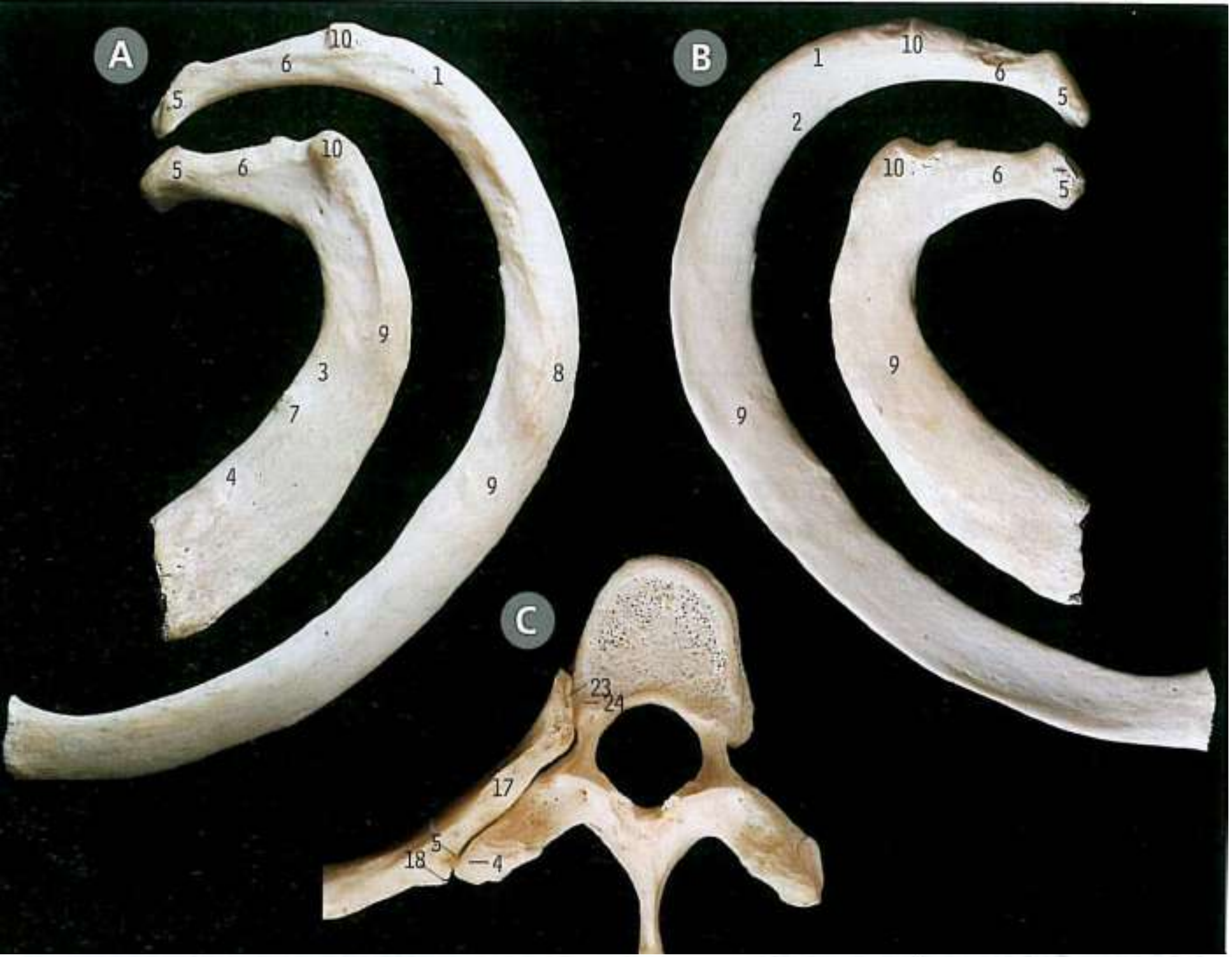
a)Anterior enad
b)Posterior end
c)Shaft

IDENTIFY SIDE OF THE TYPICAL RIB(RIGHR OR LEFT):

1)Upward :the rounded upper border of the shaft
2)medially: the shaft is concave medially
3)anteriorly: the ant end has a cup- shaped concavity

IDENTIFY THE FIRST RIB(RIGHT OR LEFT):

1)Upper surface is rough while the lower surface is smooth
2)The ant end is large &cup _shape while the posterior end has small head
3)The outer border is convex while the inner border is concave



Left first rib (inner) and second rib (outer)

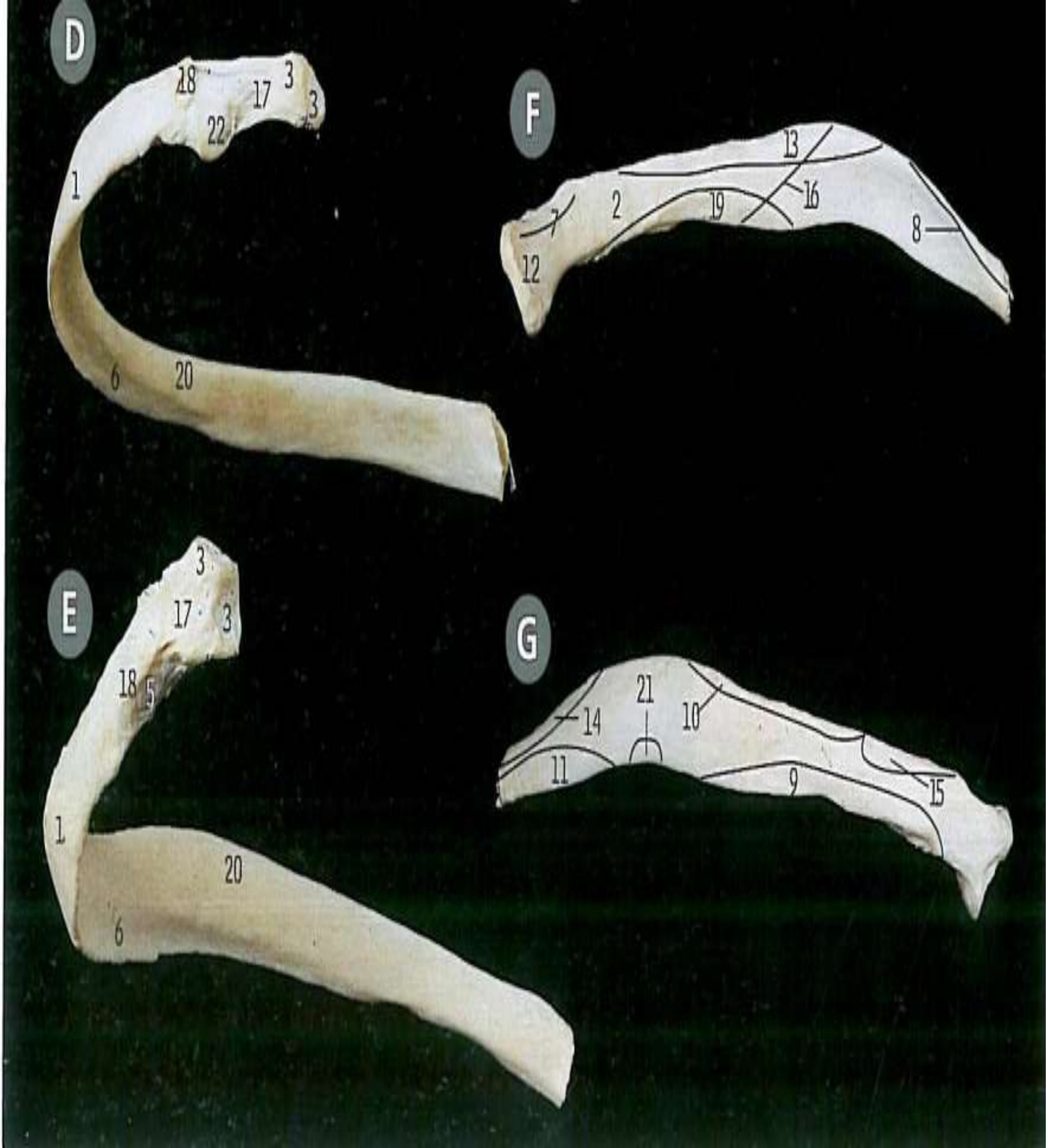
Ⓐ from above

Ⓑ from below

1 Angle
2 Costal groove
3 Groove for subclavian artery and first thoracic nerve
4 Groove for subclavian vein
5 Head
6 Neck
7 Scalene tubercle
8 Serratus anterior tuberosity
9 Shaft
10 Tubercle

Ribs and relationships

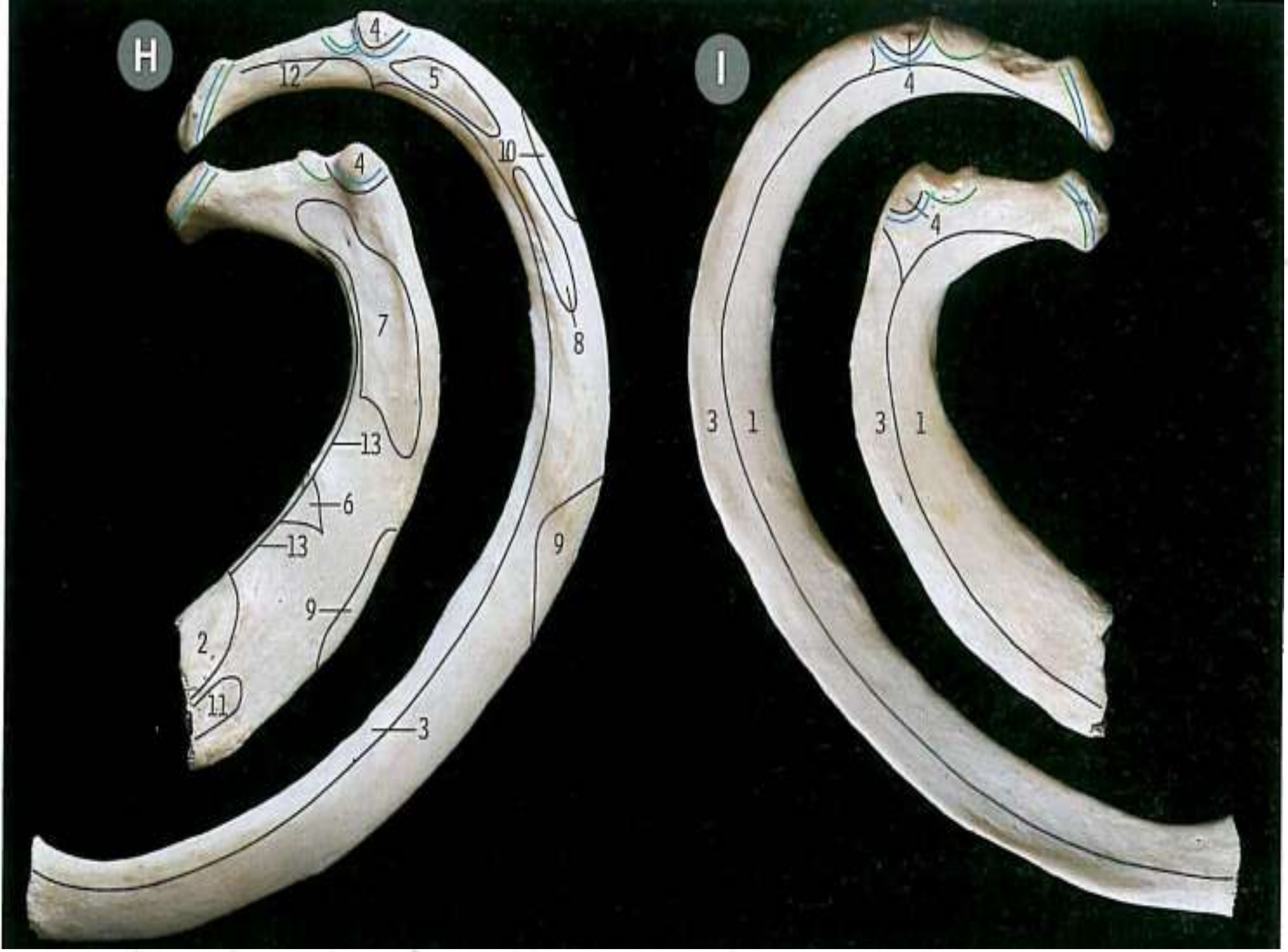
Ⓒ **a typical rib and vertebra articulated, from above**
Ⓓ **the left fifth rib from behind (a typical upper rib)**
Ⓔ **the left seventh rib from behind (a typical lower rib)**
Ⓕ **the left twelfth rib from the front, with attachments**
Ⓖ **the left twelfth rib from behind, with attachments**



1 Angle of rib
2 Area covered by pleura
3 Articular facet of head
4 Articular facet of transverse process
5 Articular part of tubercle
6 Costal groove
7 Costotransverse ligament
8 Diaphragm
9 Erector spinae

10 External intercostal
11 External oblique
12 Head
13 Internal intercostal
14 Latissimus dorsi
15 Levator costae
16 Line of pleural reflexior
17 Neck of rib
18 Non-articular part of tubercle

19 Quadratus lumborum
20 Shaft of rib
21 Serratus posterior inferior
22 Tubercle
23 Upper costal facet of head of rib
24 Upper costal facet of vertebral body



1 Area covered by pleura
2 Costoclavicular ligament
3 Intercostal muscles and membranes
4 Lateral costotransverse ligament
5 Levator costae
6 Scalenus anterior
7 Scalenus medius

8 Scalenus posterior
9 Serratus anterior
10 Serratus posterior superior
11 Subclavius
12 Superior costotransverse ligament
13 Suprapleural membrane

Left first rib (inner) and second rib (outer), attachments

H **from above** **I** **from below**

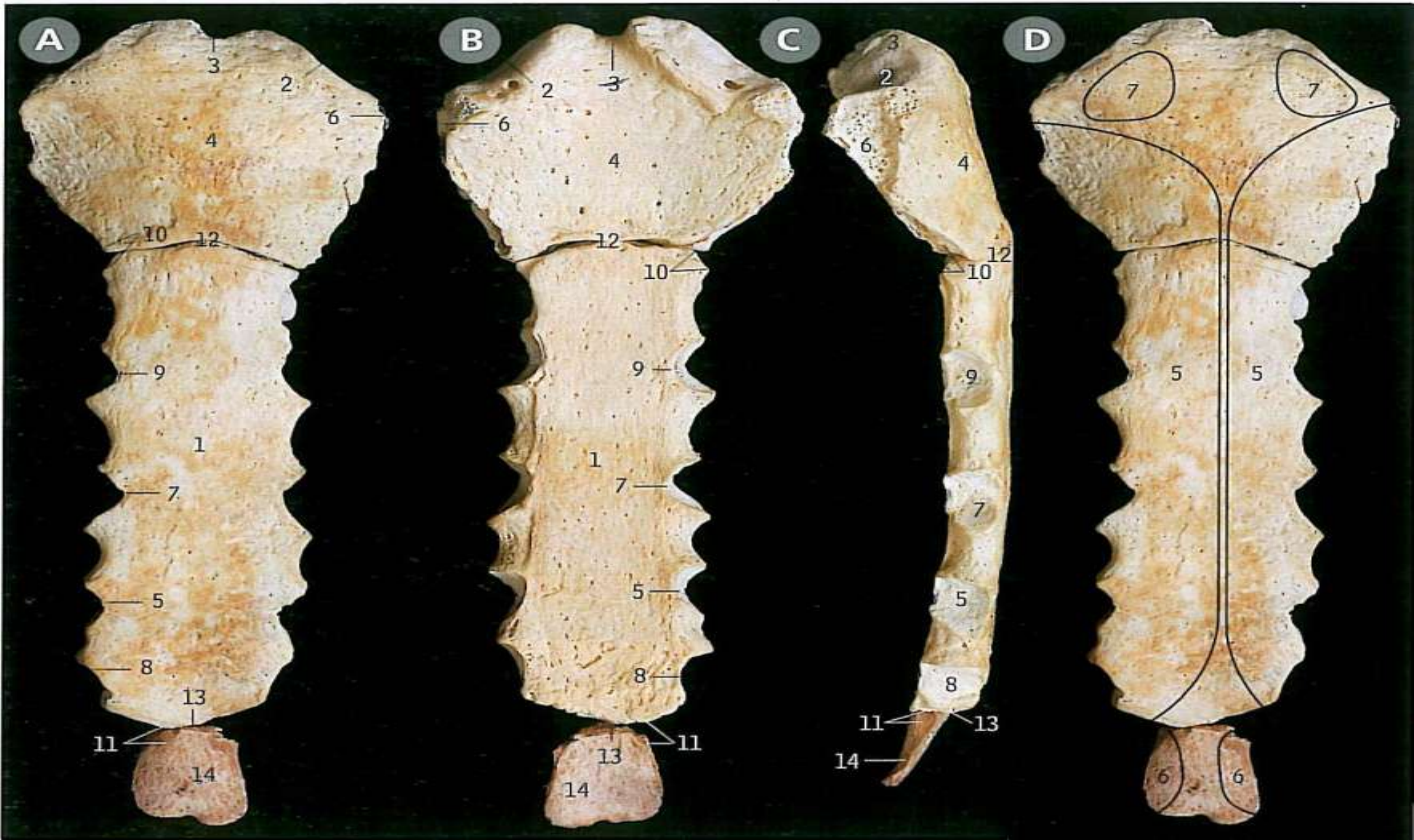
Blue lines = epiphysial lines; green lines = capsule attachments of costovertebral joints

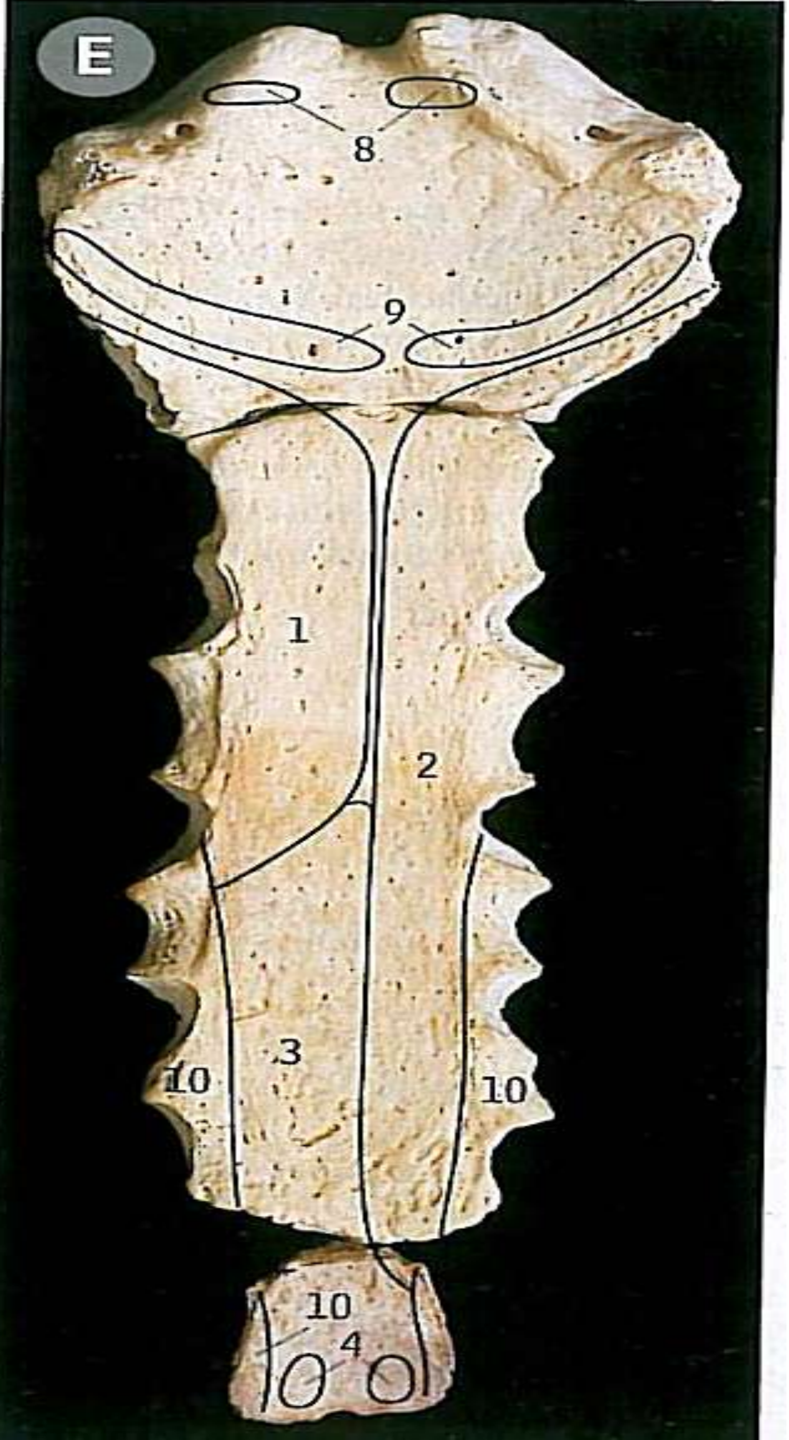
Sternum

It is a flat dagger –shaped bone which supports and erticulates with the clavicales and the upper 7 pairs of ribs

Parts:

1)manubrium 2) body 3)xiphoid process


A
3
2
6
4
10
12
9
1
7
5
8
13
11
14
B
2
3
6
4
12
10
9
1
7
5
8
11
13
14
C
3
2
6
4
12
10
9
7
5
8
11
13
14
D
7
7
5
5
6
6



The sternum

Ⓐ from the front

Ⓑ from behind

Ⓒ from the right

1 Body
2 Clavicular notch
3 Jugular notch
4 Manubrium
5 Notch for fifth costal cartilage
6 Notch for first costal cartilage
7 Notch for fourth costal cartilage
8 Notch for sixth costal cartilage
9 Notch for third costal cartilage
10 Notches for second costal cartilage
11 Notches for seventh costal cartilage
12 Sternal angle and manubriosternal joint
13 Xiphisternal joint
14 Xiphoid process

The sternum

attachments

Ⓓ from the front

Ⓔ from behind

1 Area covered by left pleura
2 Area covered by right pleura
3 Area in contact with pericardium
4 Diaphragm
5 Pectoralis major
6 Rectus abdominis
7 Sternocleidomastoid
8 Sternohyoid
9 Sternothyroid
10 Transversus thoracis

Thoracic vertebra :

1)Typical vertebrae(from 2-8)

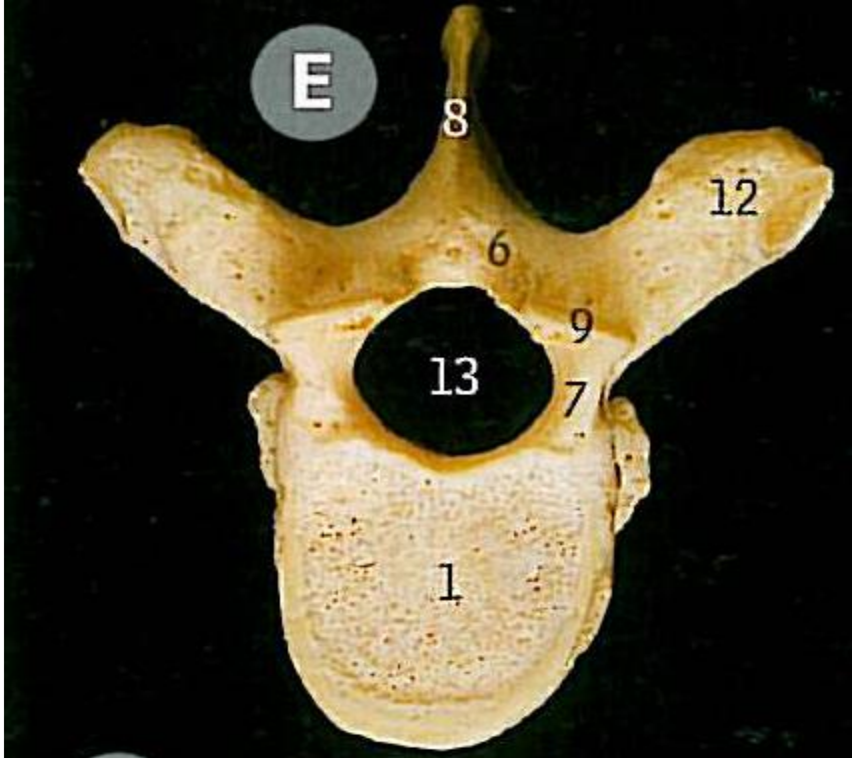
2)Non typical vertebrae(1th 9th 10 th 11th 12th)

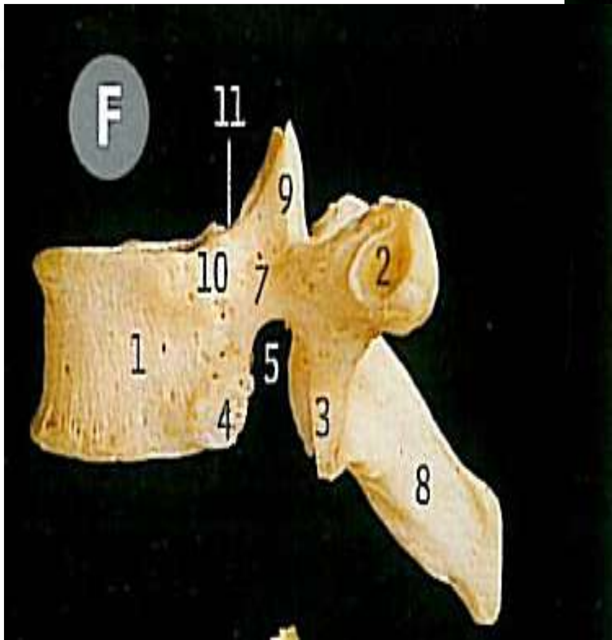
Seventh thoracic vertebra

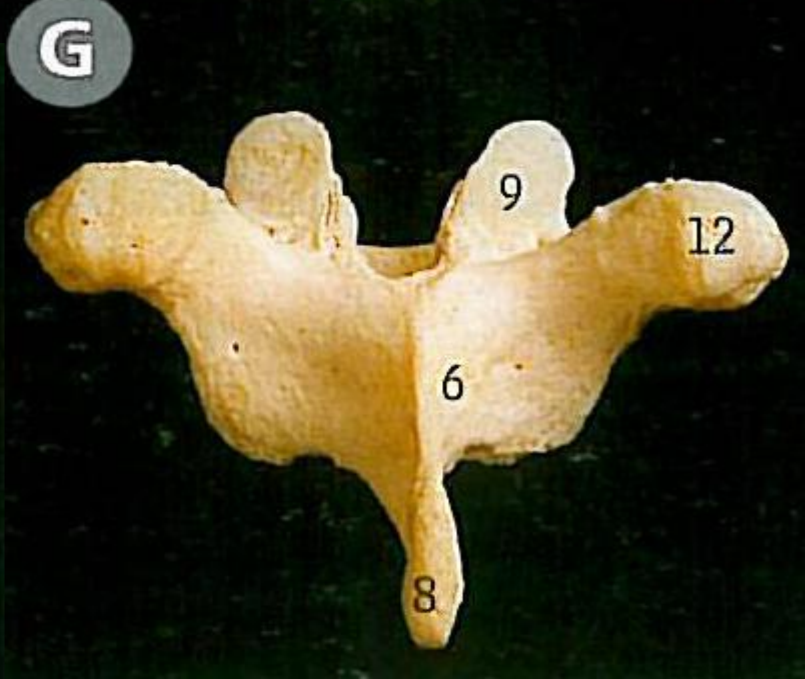
typical

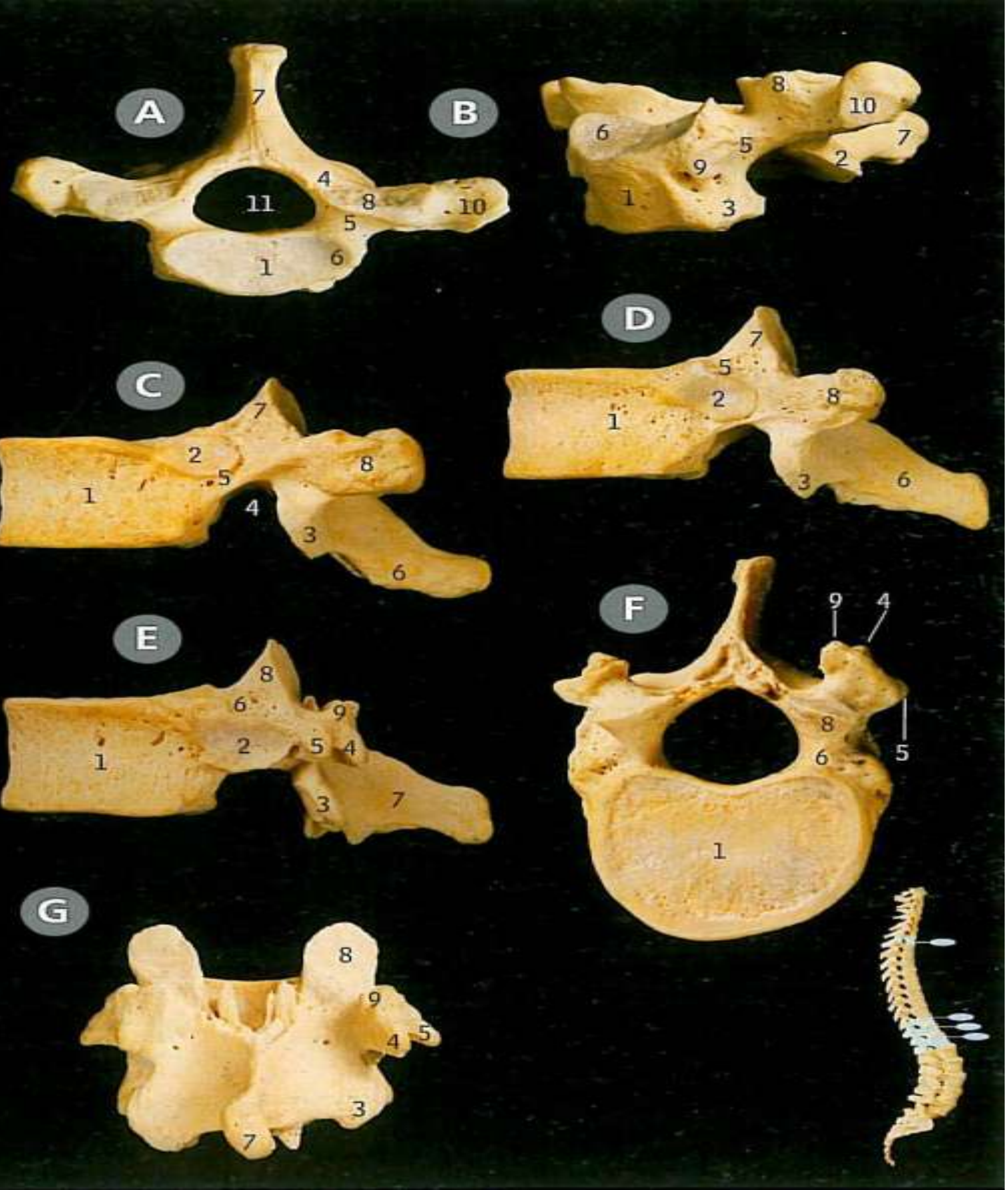
- Ⓔ from above
- Ⓕ from the left
- Ⓖ from behind

1 Body
2 Costal facet of transverse process
3 Inferior articular process
4 Inferior costal facet
5 Inferior vertebral notch
6 Lamina
7 Pedicle
8 Spinous process
9 Superior articular process
10 Superior costal facet
11 Superior vertebral notch
12 Transverse process
13 Vertebral foramen








A
7
4
11
8
10
5
1
6
B
8
10
6
7
5
9
2
1
3
C
7
2
8
5
1
4
3
6
D
7
5
2
8
1
3
6
E
8
6
9
2
5
4
1
3
7
F
9
4
8
6
5
1
G
8
9
5
4
3
7

First thoracic vertebra

Ⓐ from above

Ⓑ from the front and the left

1 Body
2 Inferior articular process
3 Inferior costal facet
4 Lamina
5 Pedicle
6 Posterolateral lip (uncus)
7 Spinous process
8 Superior articular process
9 Superior costal facet
10 Transverse process with costal facet
11 Vertebral foramen

Tenth and eleventh thoracic vertebra

Ⓒ **tenth thoracic vertebra, from the left**

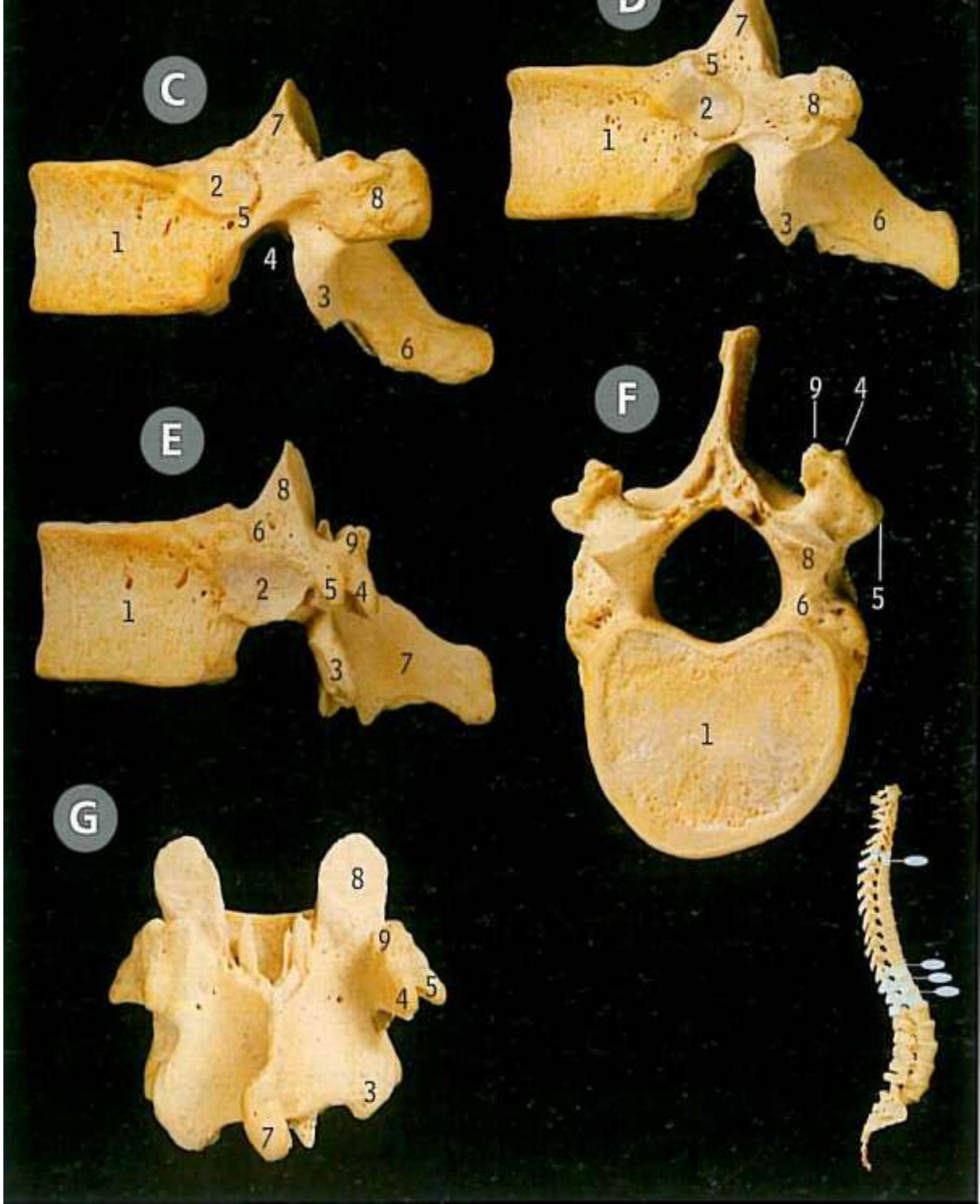
Ⓓ **eleventh thoracic vertebra, from the left**

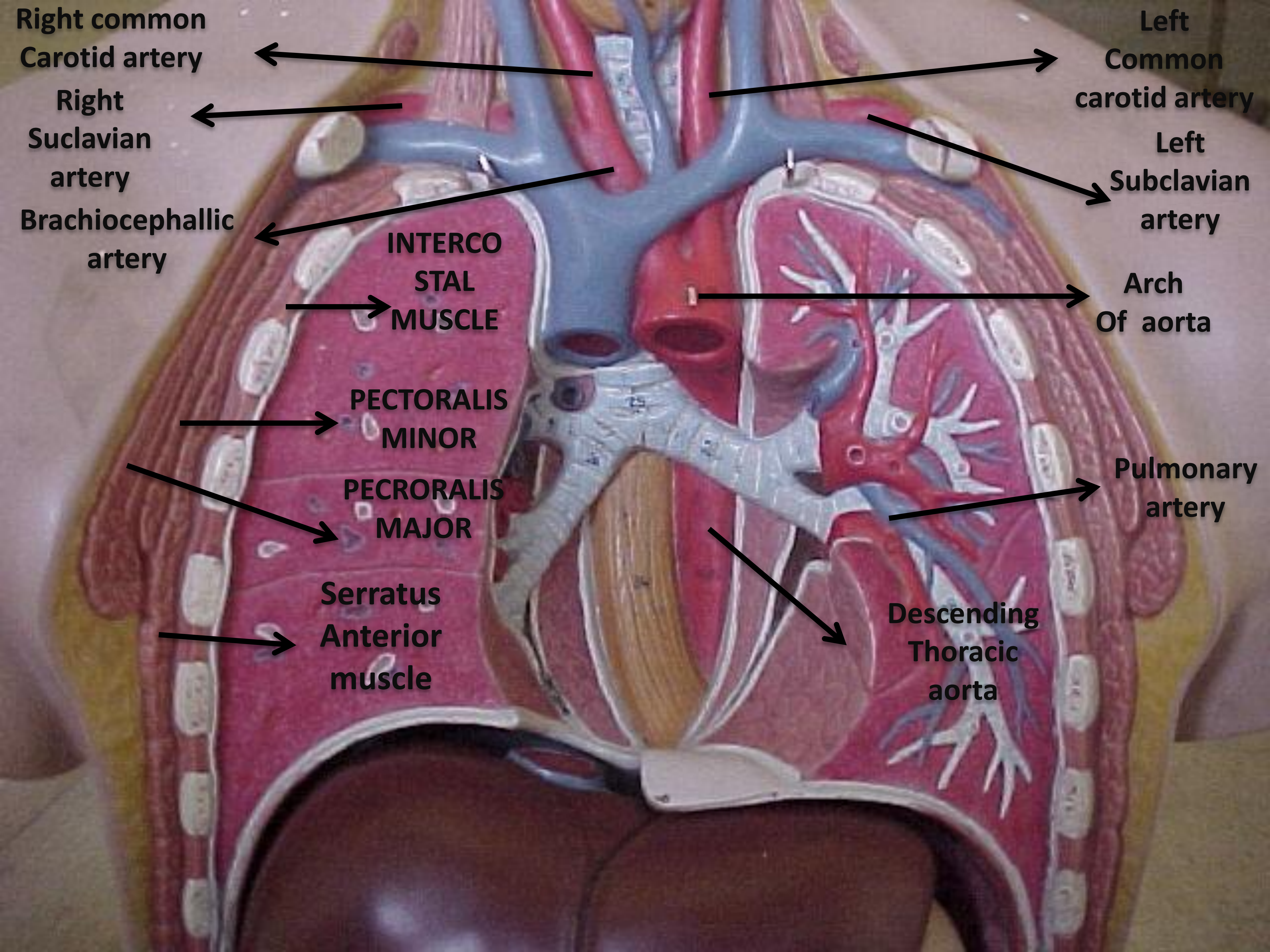
1 Body
2 Costal facet
3 Inferior articular process
4 Inferior vertebral notch
5 Pedicle
6 Spinous process
7 Superior articular process
8 Transverse process

Twelfth thoracic vertebra

- **E** from the left
- **F** from above
- **G** from behind

1 Body
2 Costal facet
3 Inferior articular process
4 Inferior tubercle
5 Lateral tubercle
6 Pedicle
7 Spinous process
8 Superior articular process
9 Superior tubercle


C
1
2
5
4
7
8
3
6
D
7
5
2
8
1
3
6
E
8
6
9
2
5
4
1
3
7
F
9
4
8
5
6
1
G
8
9
5
4
3
7



Right common Carotid artery

Right Suclavian artery

Brachiocephallic artery

INTERCOSTAL MUSCLE

PECTORALIS MINOR

PECRORALIS MAJOR

Serratus Anterior muscle

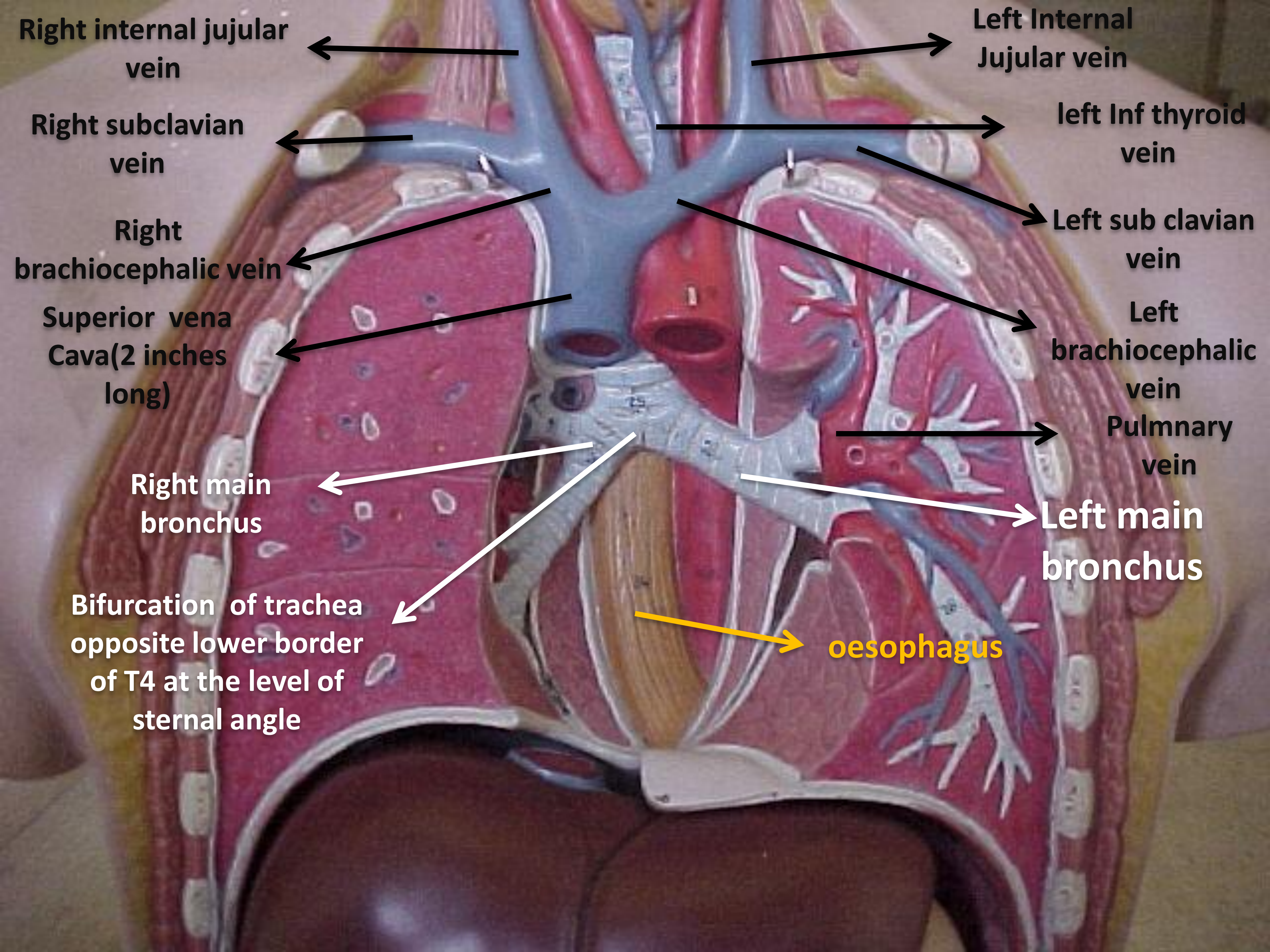
Left Common carotid artery

Left Subclavian artery

Arch Of aorta

Pulmonary artery

Descending Thoracic aorta



Right internal jujular vein

Right subclavian vein

Right brachiocephalic vein

Superior vena Cava(2 inches long)

Right main bronchus

Bifurcation of trachea opposite lower border of T4 at the level of sternal angle

Left Internal Jujular vein

left Inf thyroid vein

Left sub clavian vein

Left brachiocephalic vein

Pulmnary vein

Left main bronchus

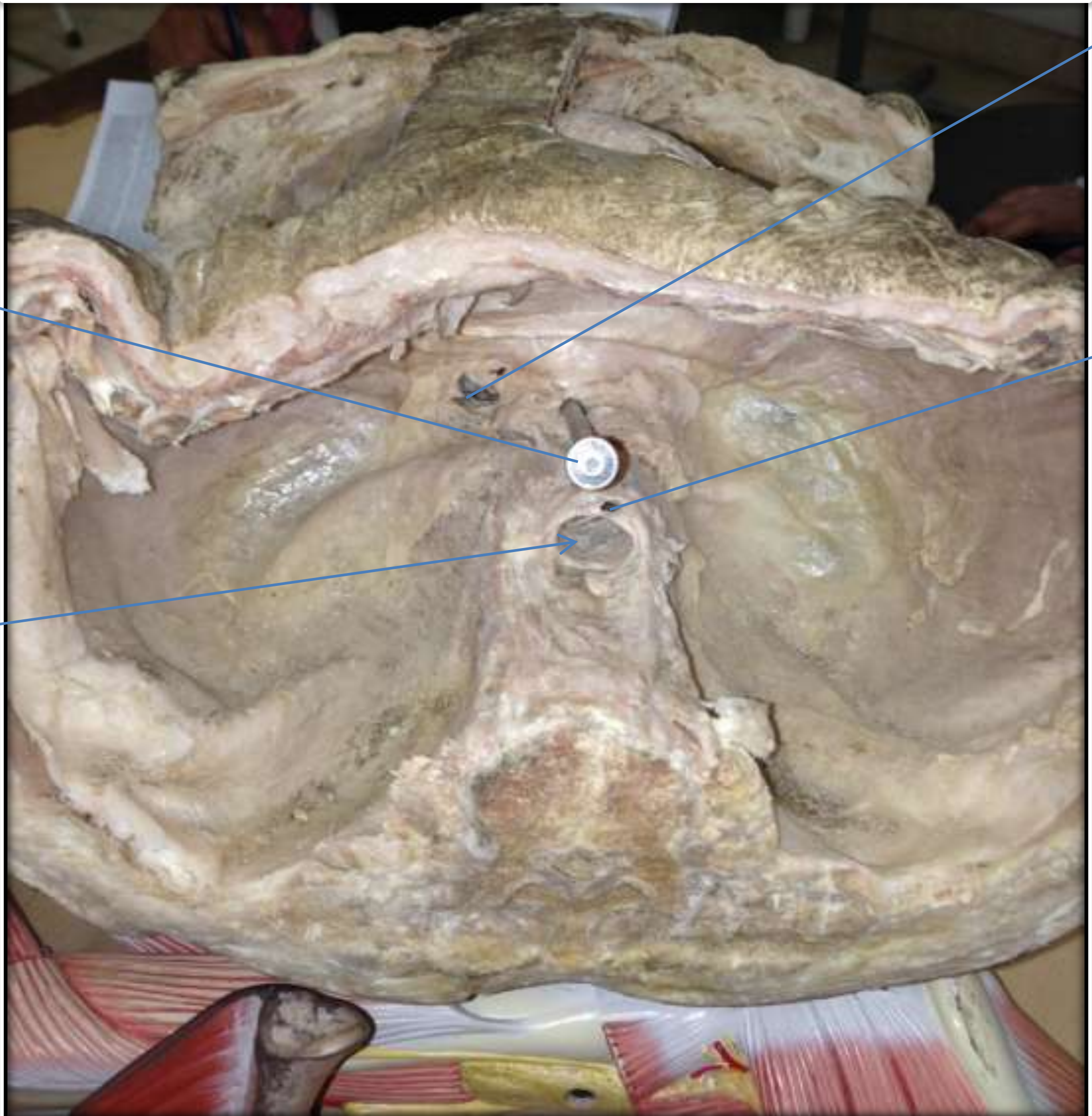
oesophagus

MAJOR FORAMINA OF DIAPHRAGM

VOICE:VENA CAVAL OPENING

OF: OESOPHAGEAL

AMERICA: AORTIC OPENING

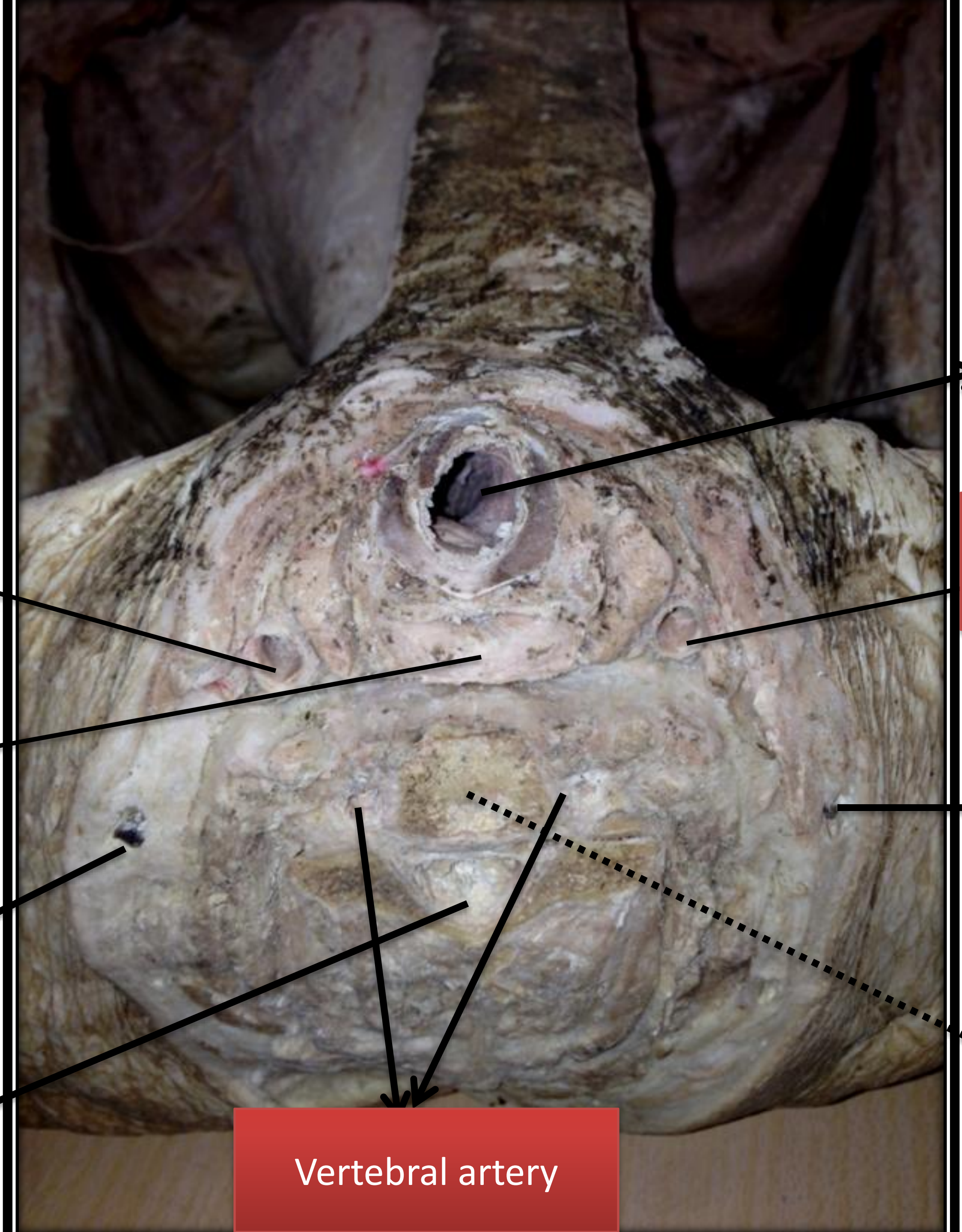


INF.VENA.OPENING

OSEPHAGUS OPENING

THORACIC DUCT

AORTIC OPENING



TRACHEA

COMMON CAROTID ARTERY

COMMON. CAROTID.ARTERY

OSEPHAGUS

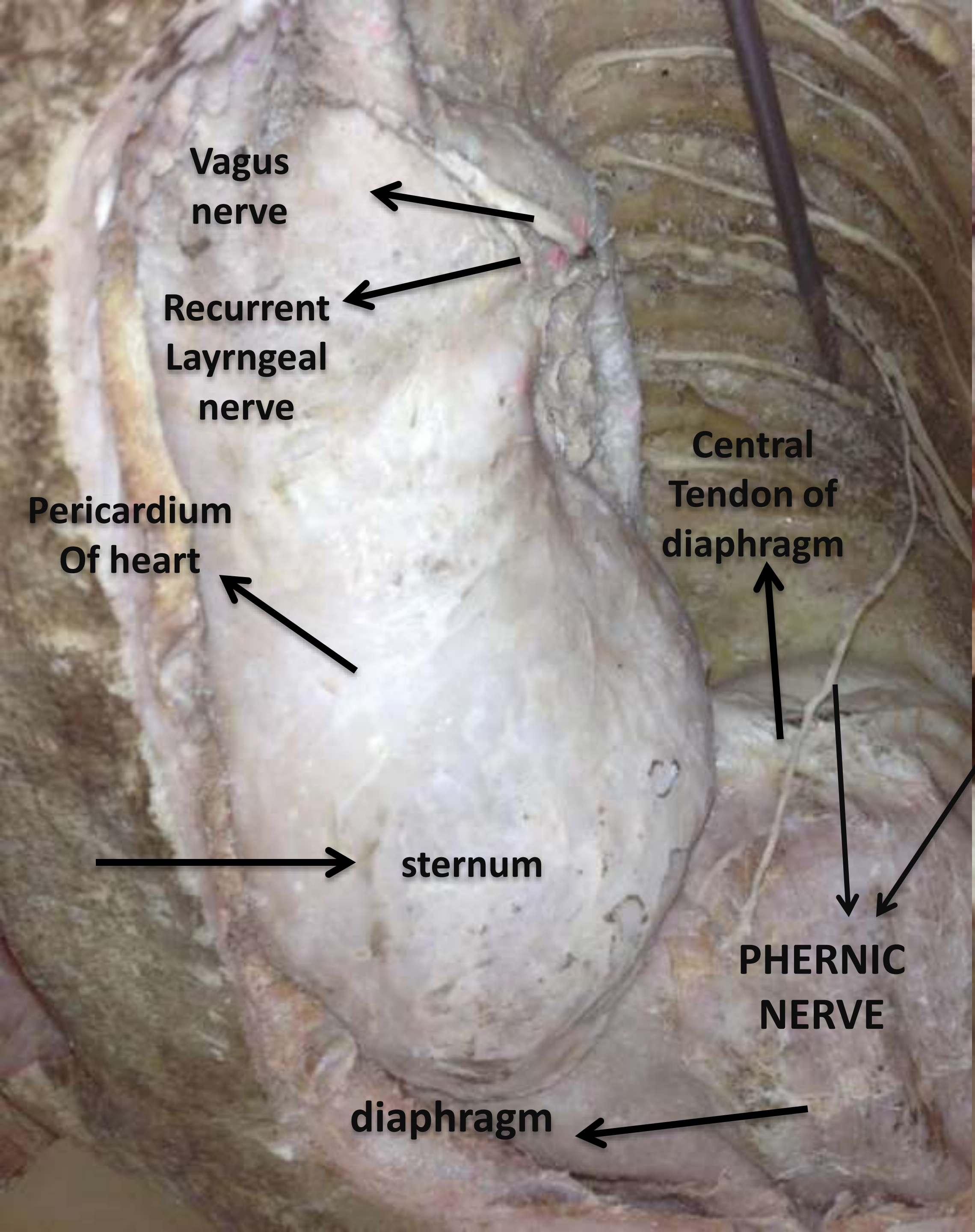
External jugular vein

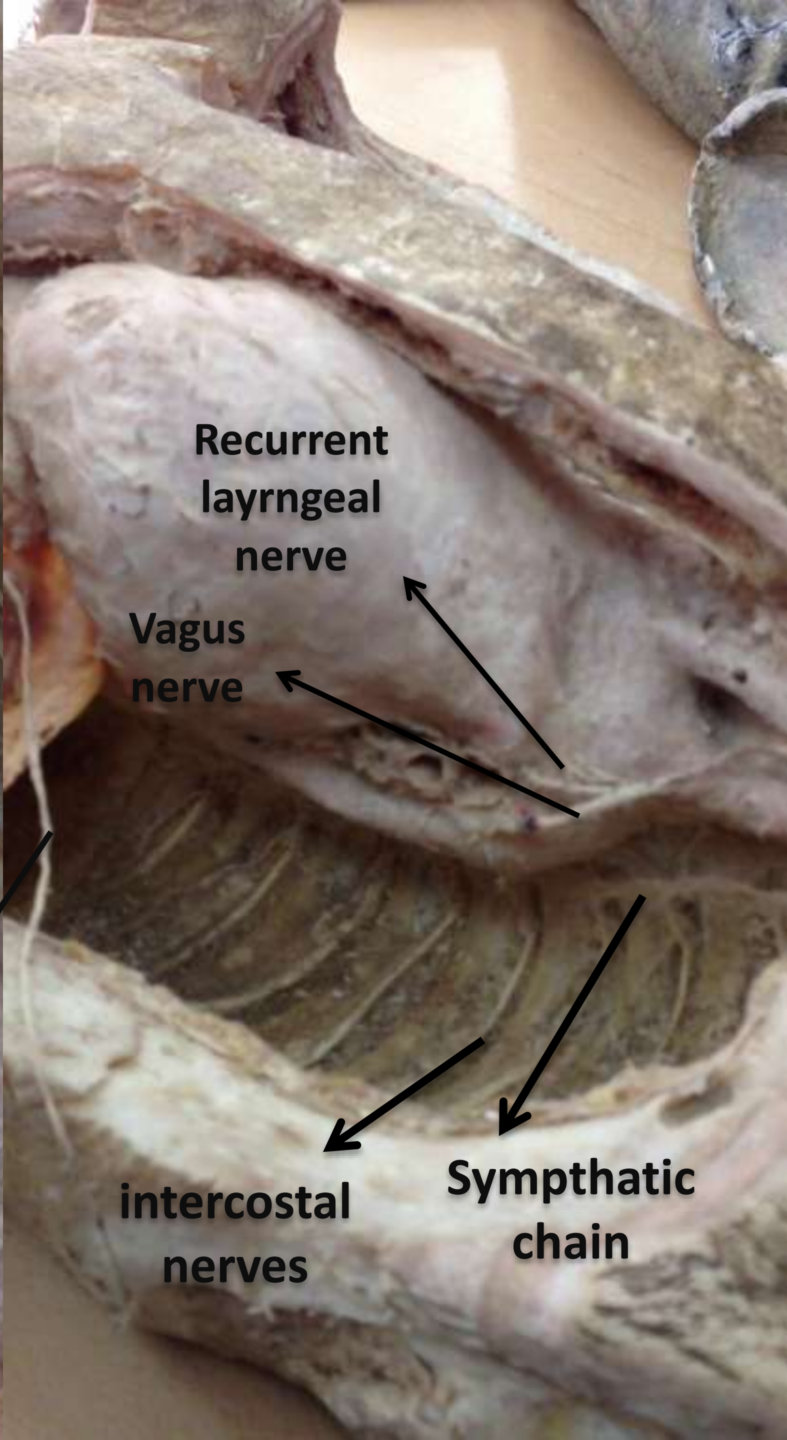
External Jajular vein

vertebra

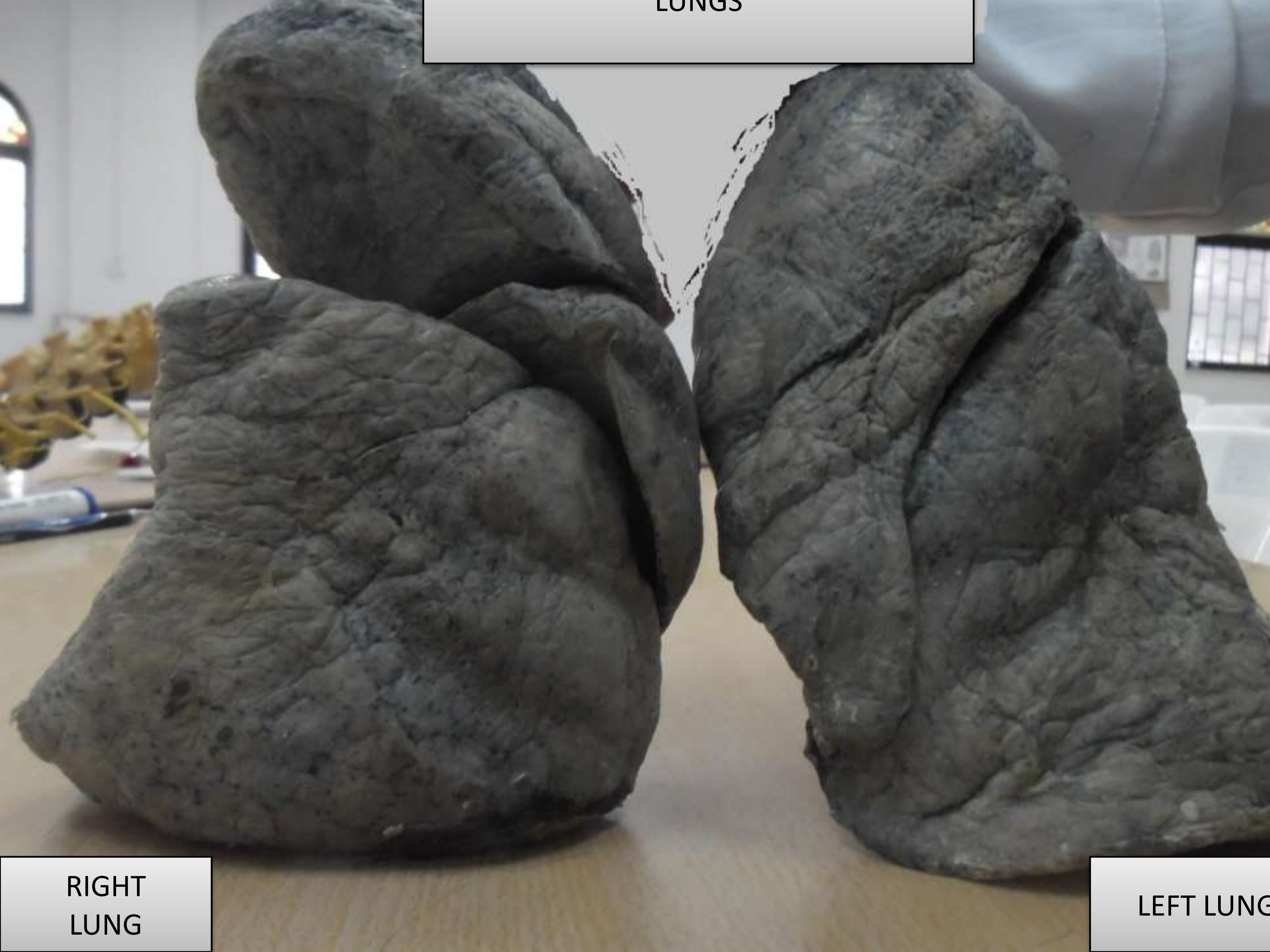
Spinal cord
وراء الفقرة

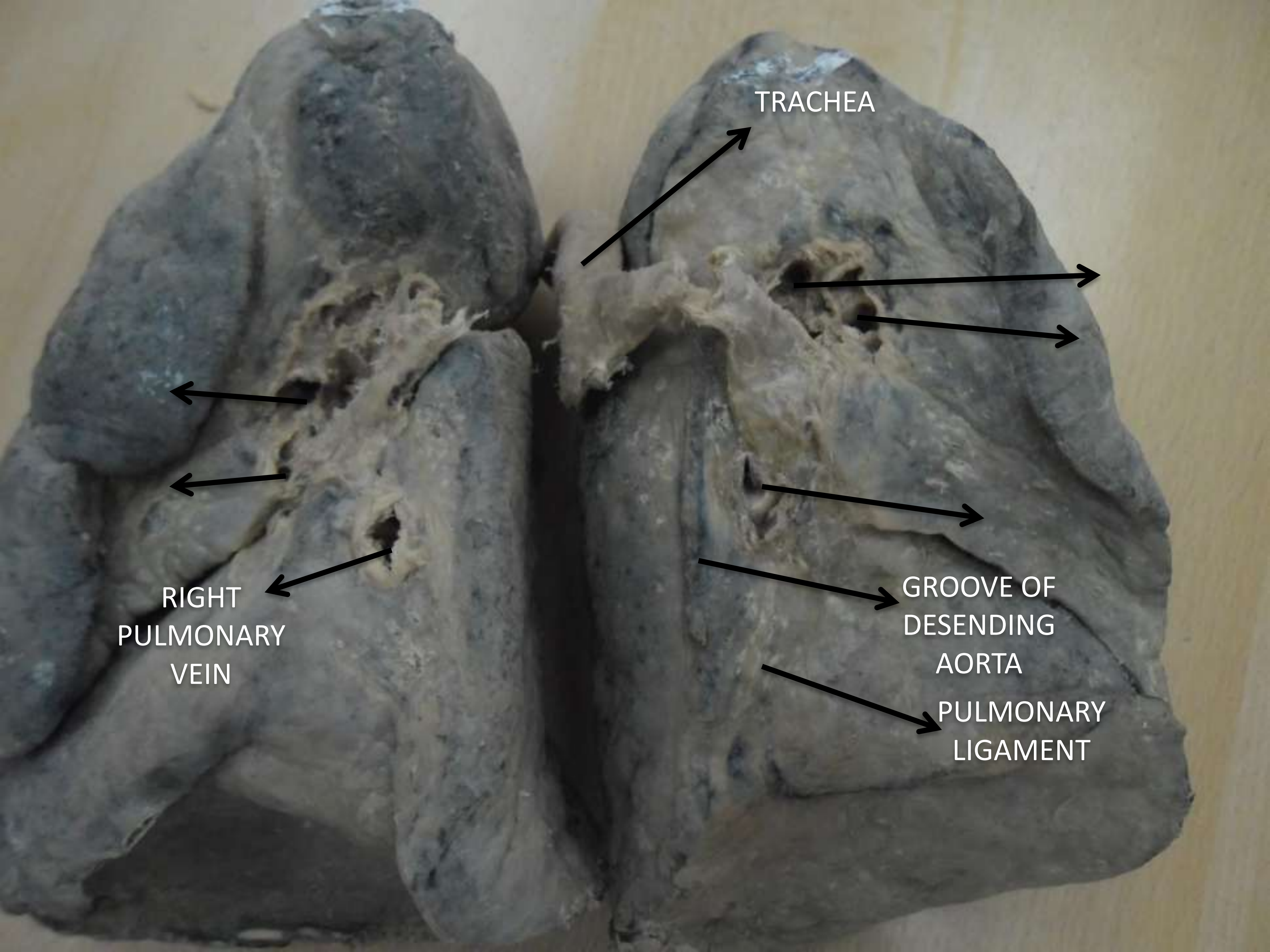
Vertebral artery


Vagus nerve
Recurrent Layrngeal nerve
Pericardium Of heart
Central Tendon of diaphragm
sternum
PHERNIC NERVE
diaphragm

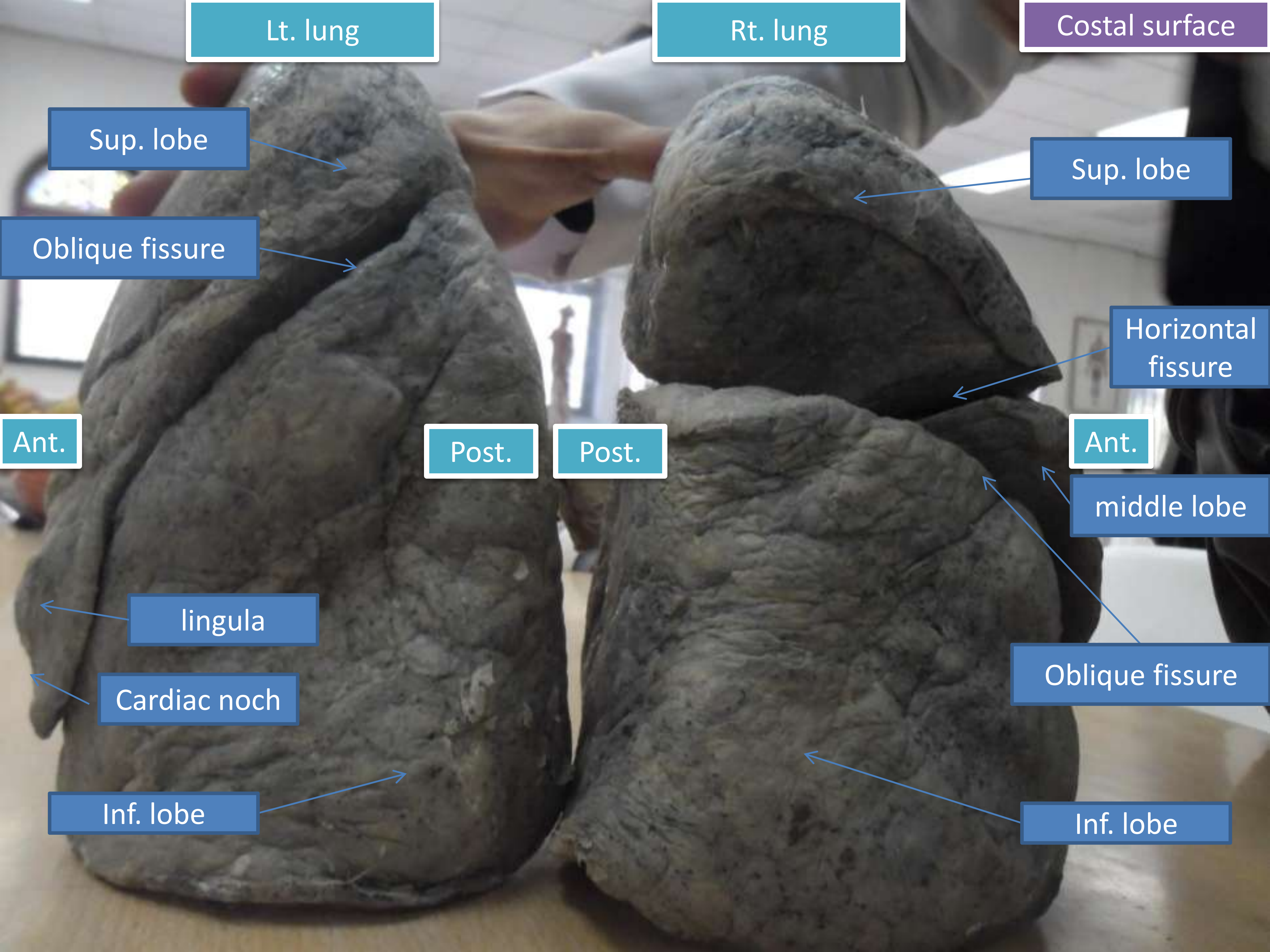

Recurrent layrngeal nerve
Vagus nerve
intercostal nerves
Sympthatic chain

LUNGS


RIGHT LUNG
LEFT LUNG


TRACHEA
RIGHT PULMONARY VEIN
GROOVE OF DESENDING AORTA
PULMONARY LIGAMENT

Costal surface



Lt. lung

Rt. lung

Sup. lobe

Oblique fissure

Ant.

Post.

lingula

Cardiac noch

Inf. lobe

Post.

Sup. lobe

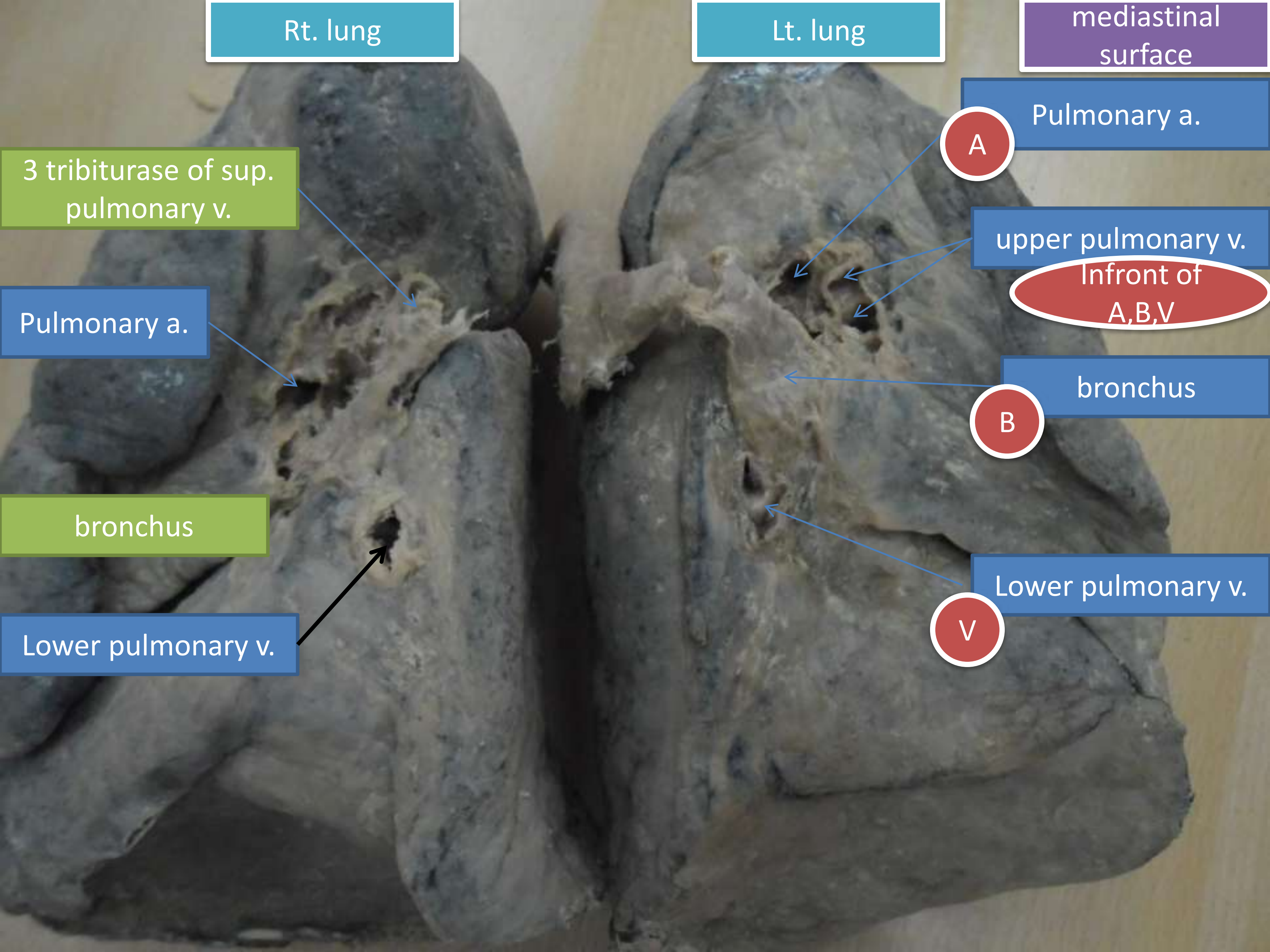
Horizontal fissure

Ant.

middle lobe

Oblique fissure

Inf. lobe



Rt. lung

Lt. lung

mediastinal surface

3 tributarase of sup. pulmonary v.

Pulmonary a.

bronchus

Lower pulmonary v.

A Pulmonary a.

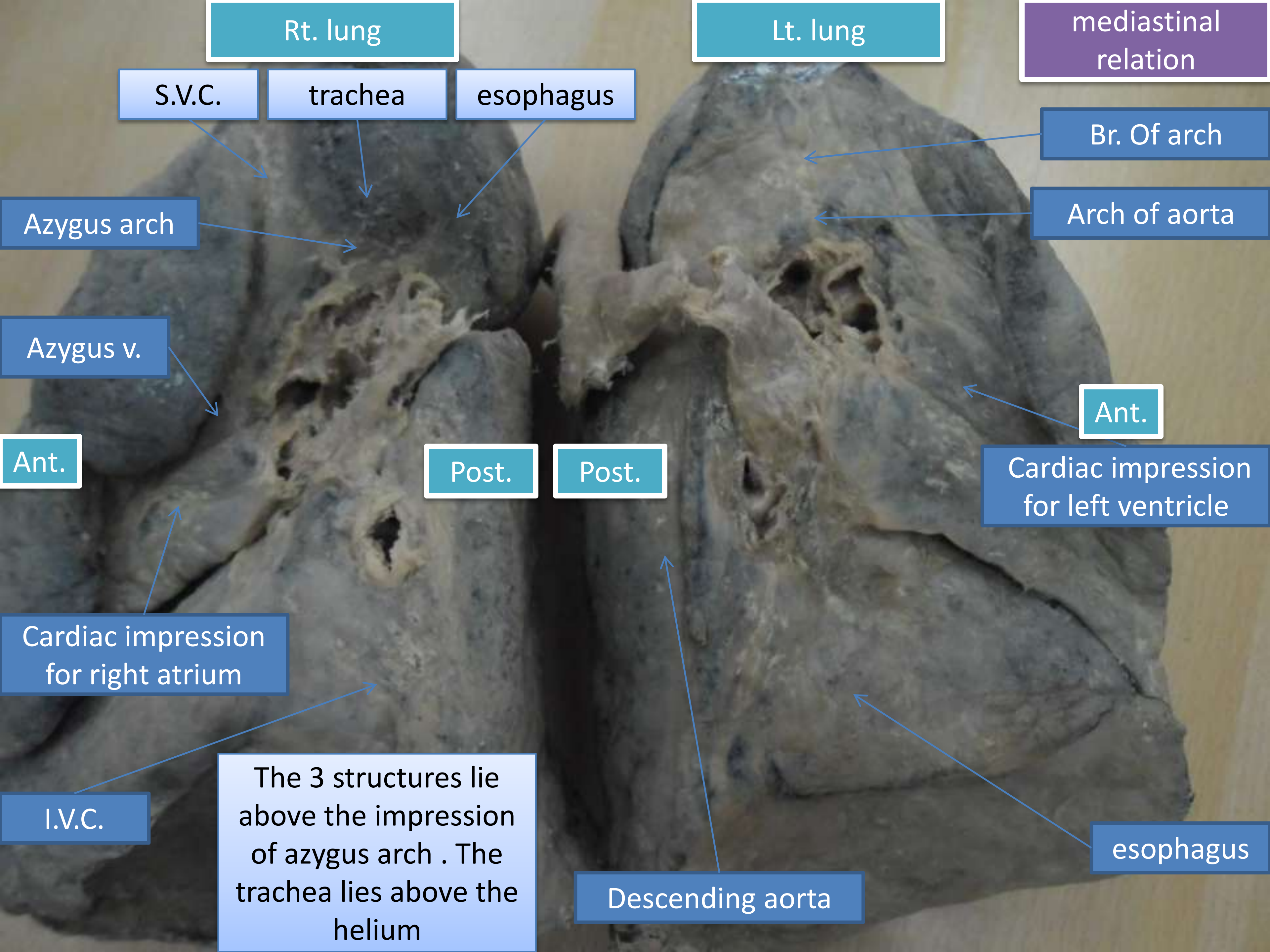
upper pulmonary v.

Infront of A,B,V

B bronchus

V Lower pulmonary v.

mediastinal relation



Rt. lung

S.V.C.

trachea

esophagus

Azygus arch

Azygus v.

Ant.

Post.

Cardiac impression for right atrium

I.V.C.

The 3 structures lie above the impression of azygus arch . The trachea lies above the helium

Lt. lung

Br. Of arch

Arch of aorta

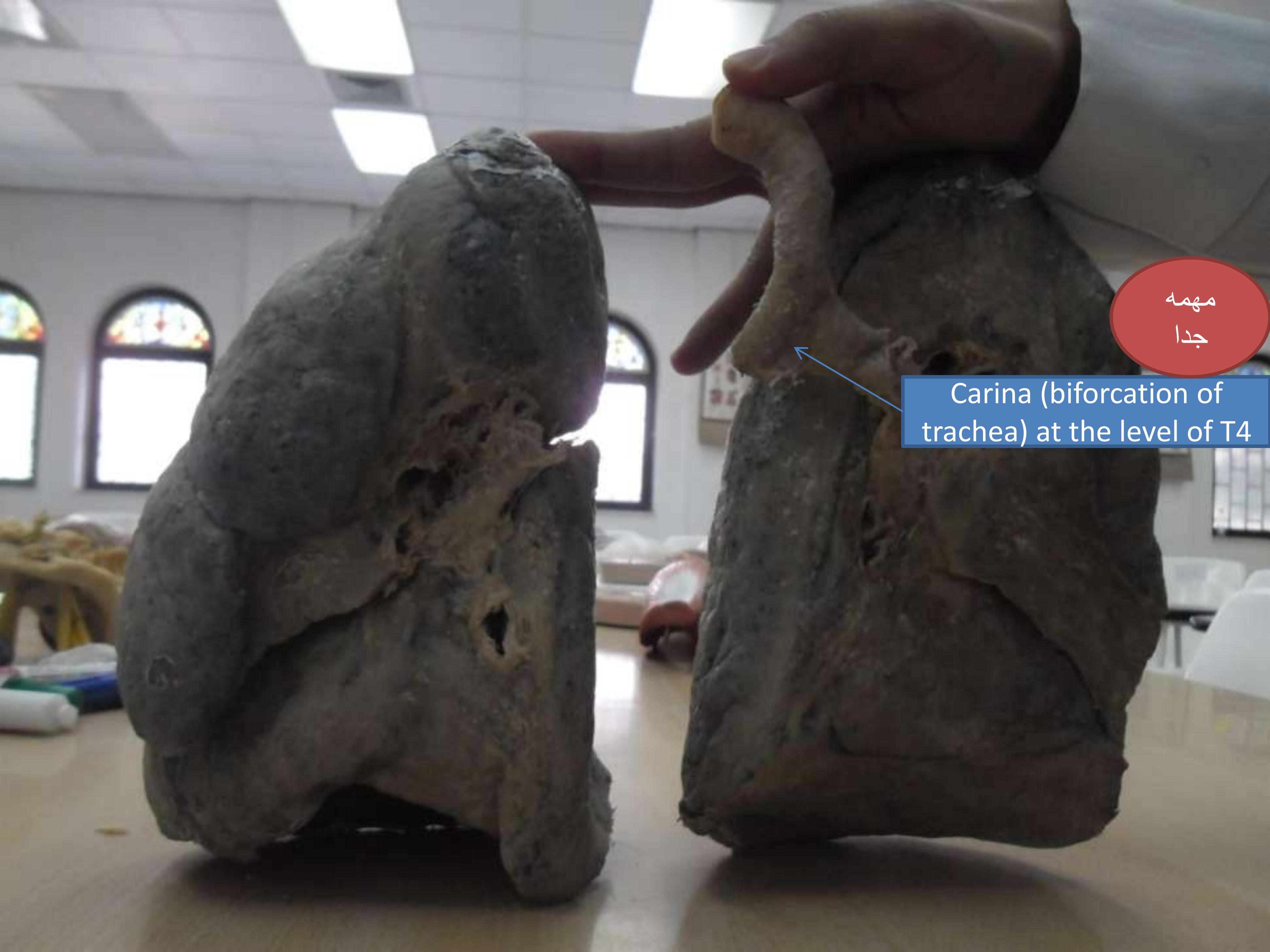
Ant.

Post.

Cardiac impression for left ventricle

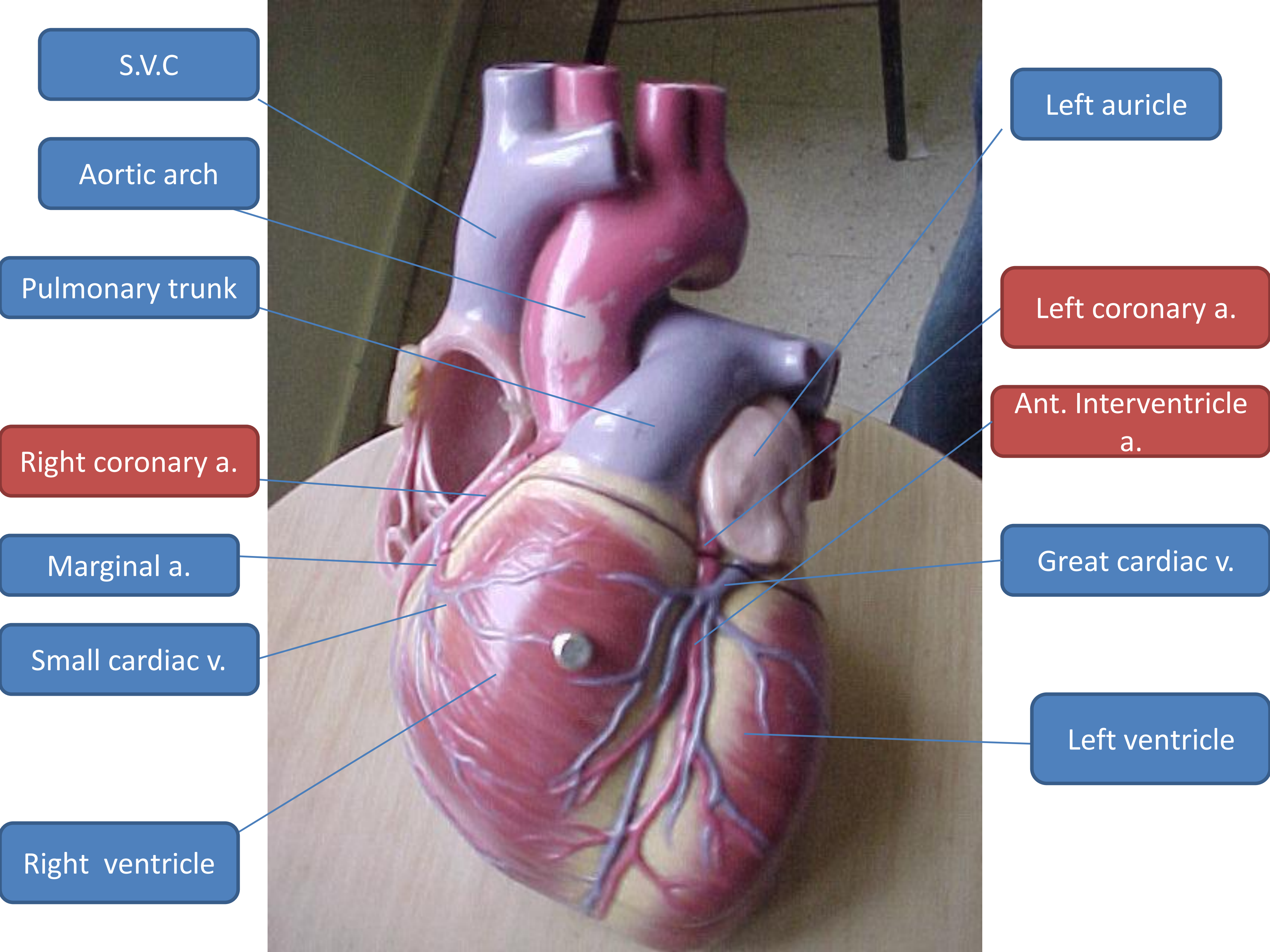
Descending aorta

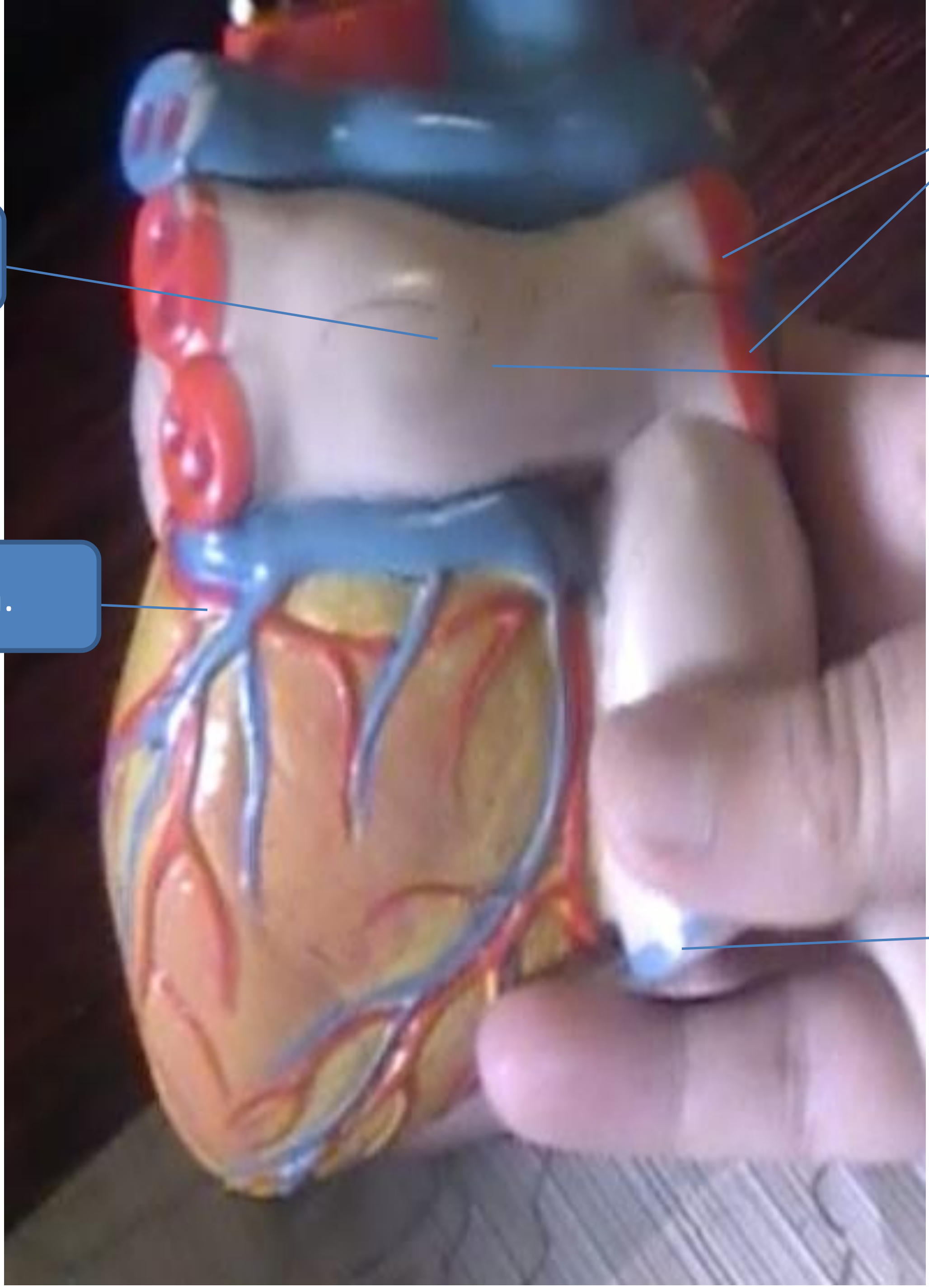
esophagus



مهمه جدا

Carina (biforcation of trachea) at the level of T4


S.V.C
Aortic arch
Pulmonary trunk
Right coronary a.
Marginal a.
Small cardiac v.
Right ventricle
Left auricle
Left coronary a.
Ant. Interventricle a.
Great cardiac v.
Left ventricle



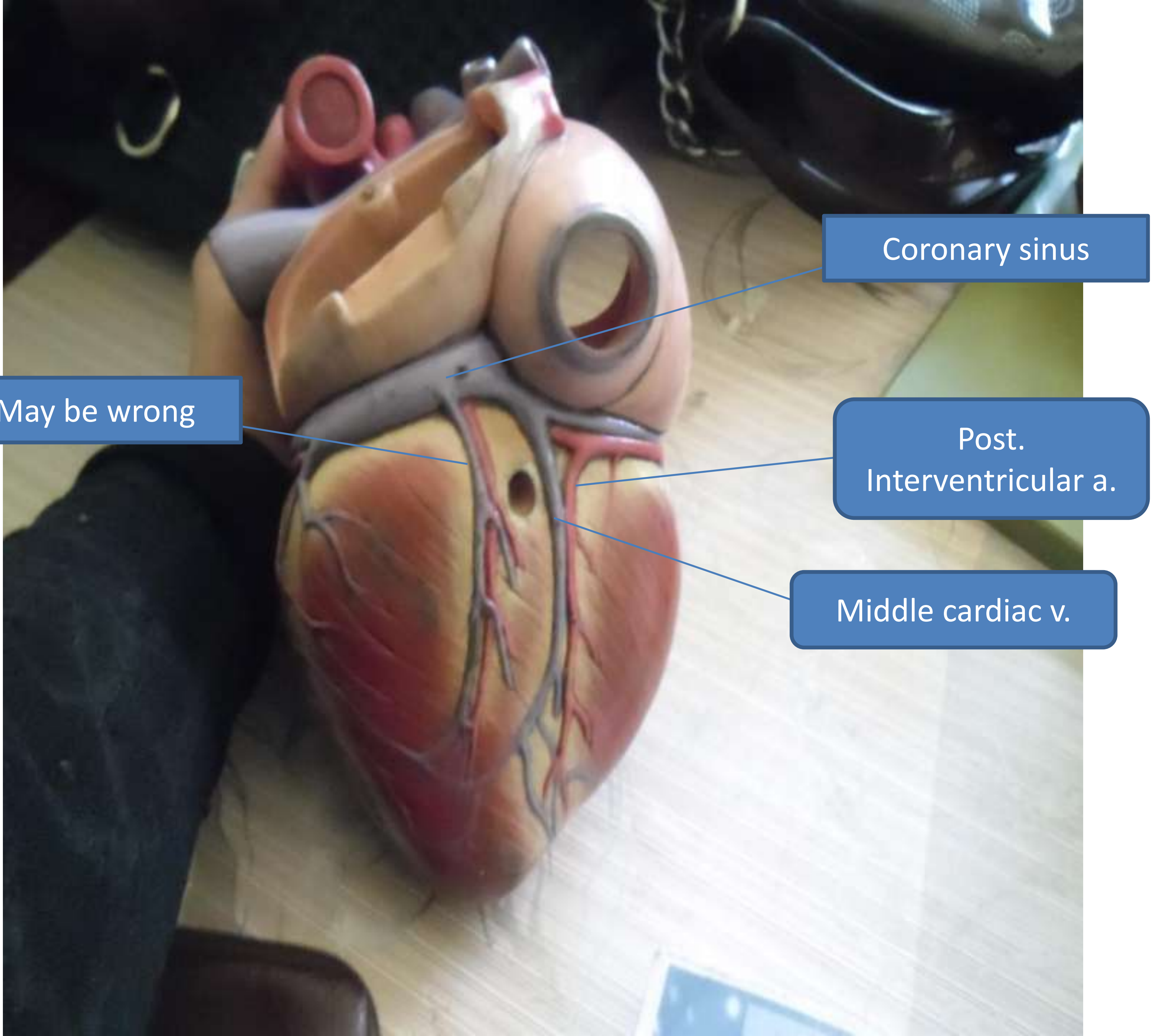
Pulmonary vein

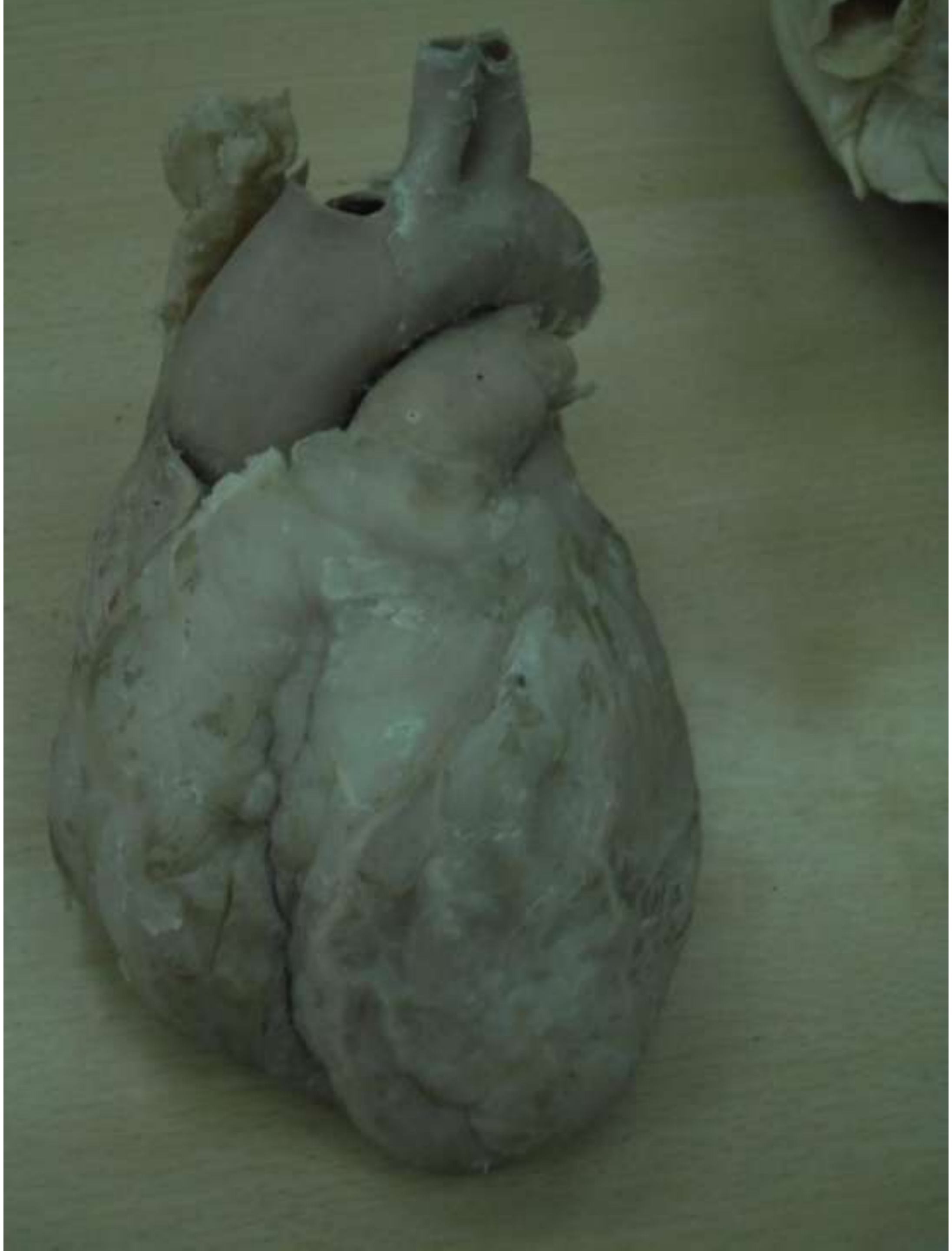
Sinus atria

Left atrium

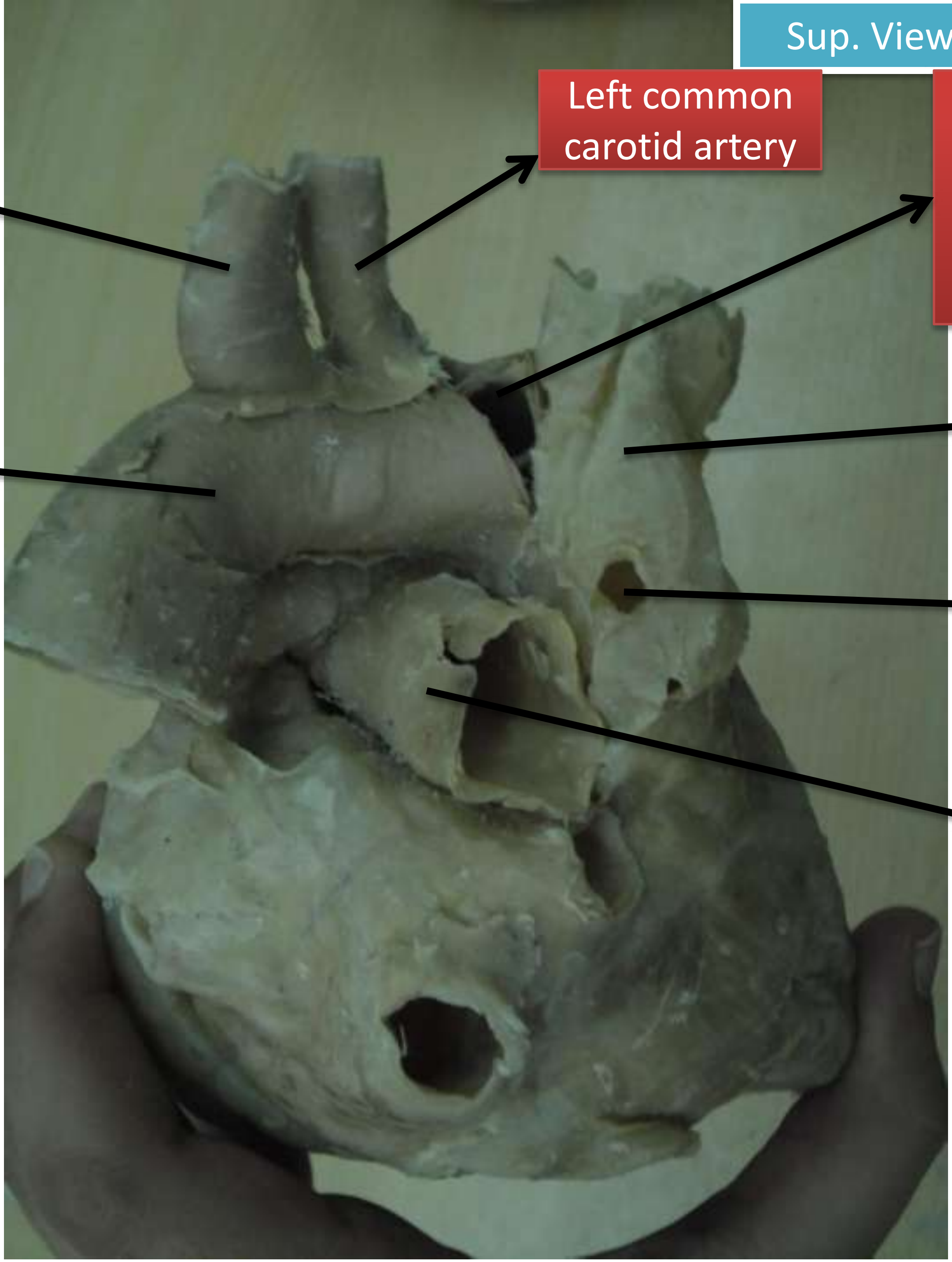
Circumflex a.

I.V.C


Coronary sinus
May be wrong
Post. Interventricular a.
Middle cardiac v.



Sup. View



Subclavine artery

Arch of aorty

Left common carotid artery

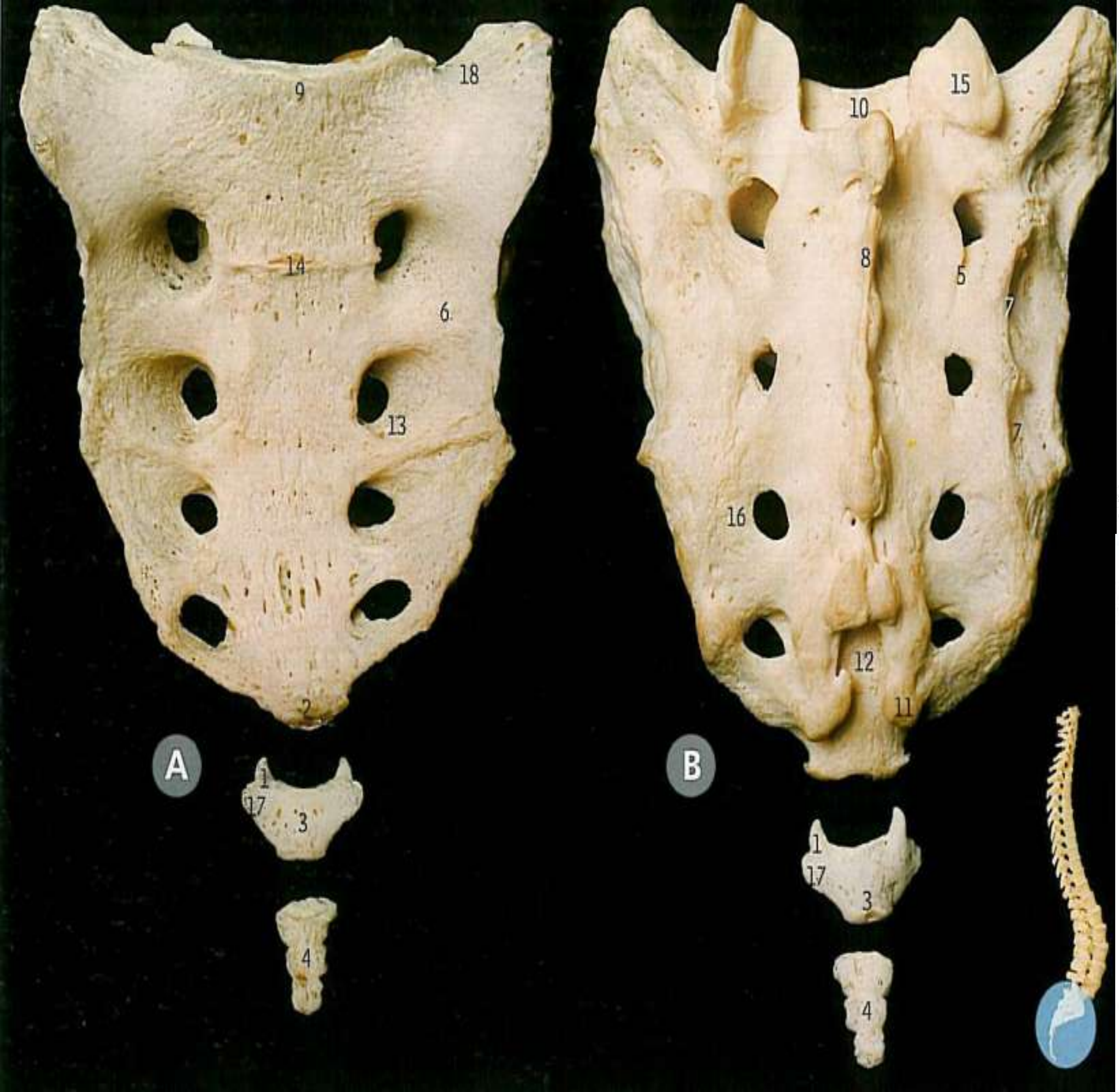
Brachcephalic artery
Artery behind sternoclavicular joint

Superior Vena cava

Azygus vein
Only trubitury of sup vena cava

Pulmonary artery

pelvis

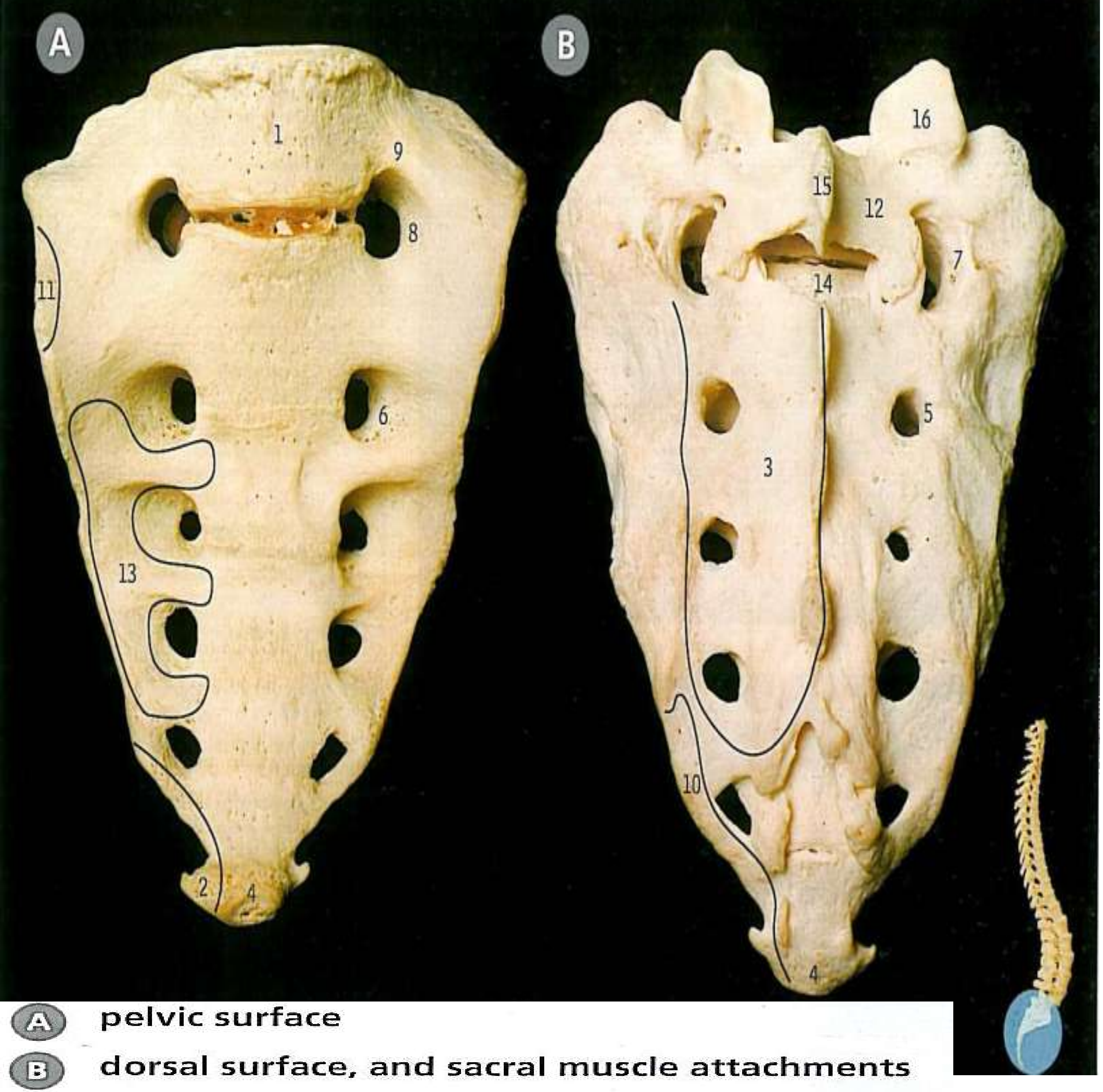


A pelvic surface

1 Coccygeal cornu
2 Facet for coccyx
3 First coccygeal vertebra
4 Fused second to fourth vertebrae
5 Intermediate sacral crest
6 Lateral part
7 Lateral sacral crest
8 Median sacral crest
9 Promontory
10 Sacral canal

B dorsal surface

11 Sacral cornu
12 Sacral hiatus
13 Second pelvic sacral foramen
14 Site of fusion of first and second sacral vertebrae
15 Superior articular process
16 Third dorsal sacral foramen
17 Transverse process
18 Upper surface of lateral part (ala)

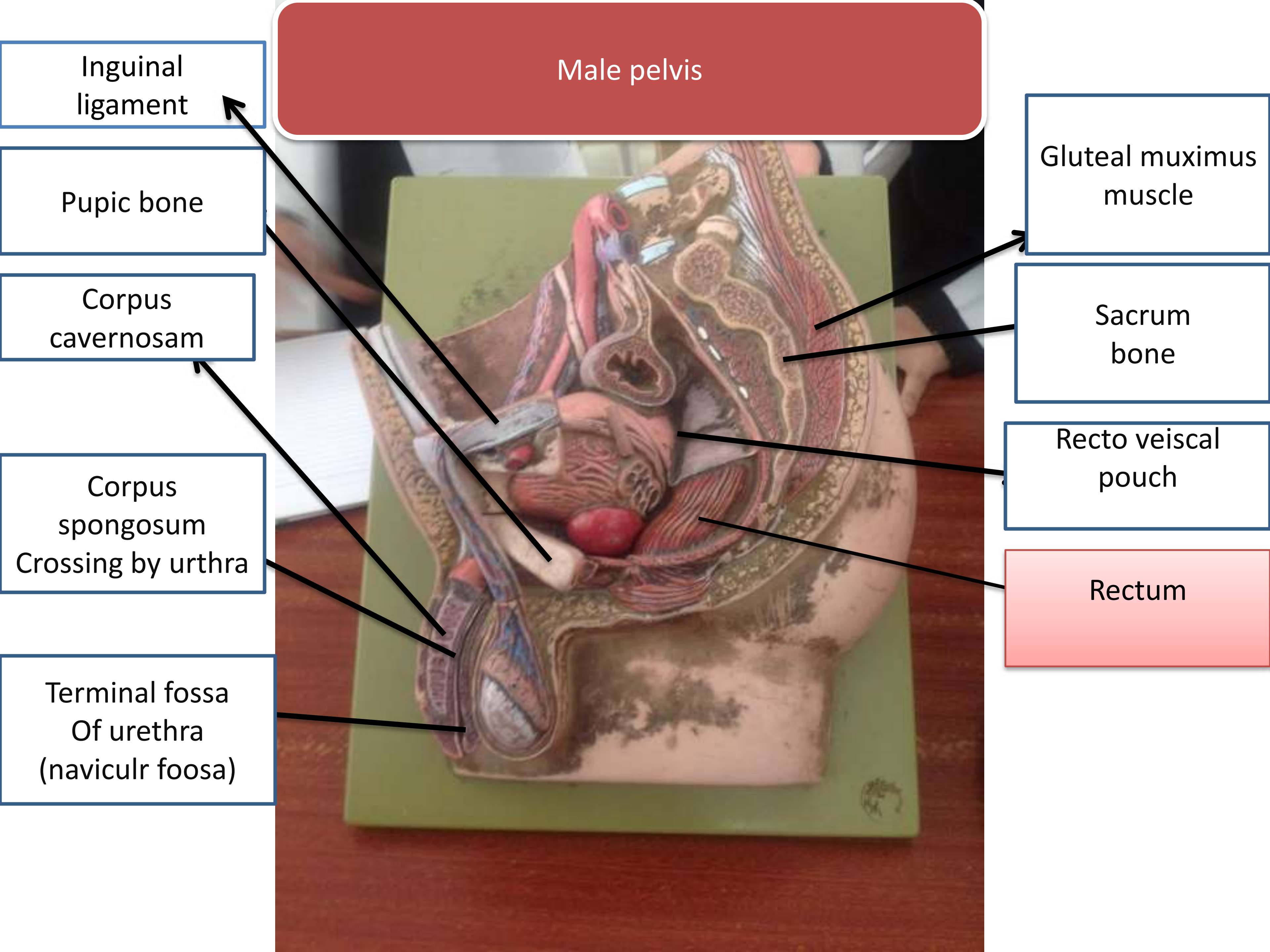


1	Body of fifth lumbar vertebra
2	Coccygeus
3	Erector spinae
4	First coccygeal vertebra fused to apex of sacrum
5	First dorsal sacral foramen
6	First pelvic sacral foramen
7	Foramen for dorsal ramus of fifth lumbar nerve
8	Foramen for ventral ramus of fifth lumbar nerve
9	Fusion of transverse process and lateral part of sacrum
10	Gluteus maximus
11	Iliacus
12	Lamina
13	Piriformis
14	Sacral canal
15	Spinous process of fifth lumbar vertebra
16	Superior articular process of fifth lumbar vertebra

A pelvic surface

B dorsal surface, and sacral muscle attachments

Male pelvis



Inguinal ligament

Pupic bone

Corpus cavernosam

Corpus spongosum Crossing by urthra

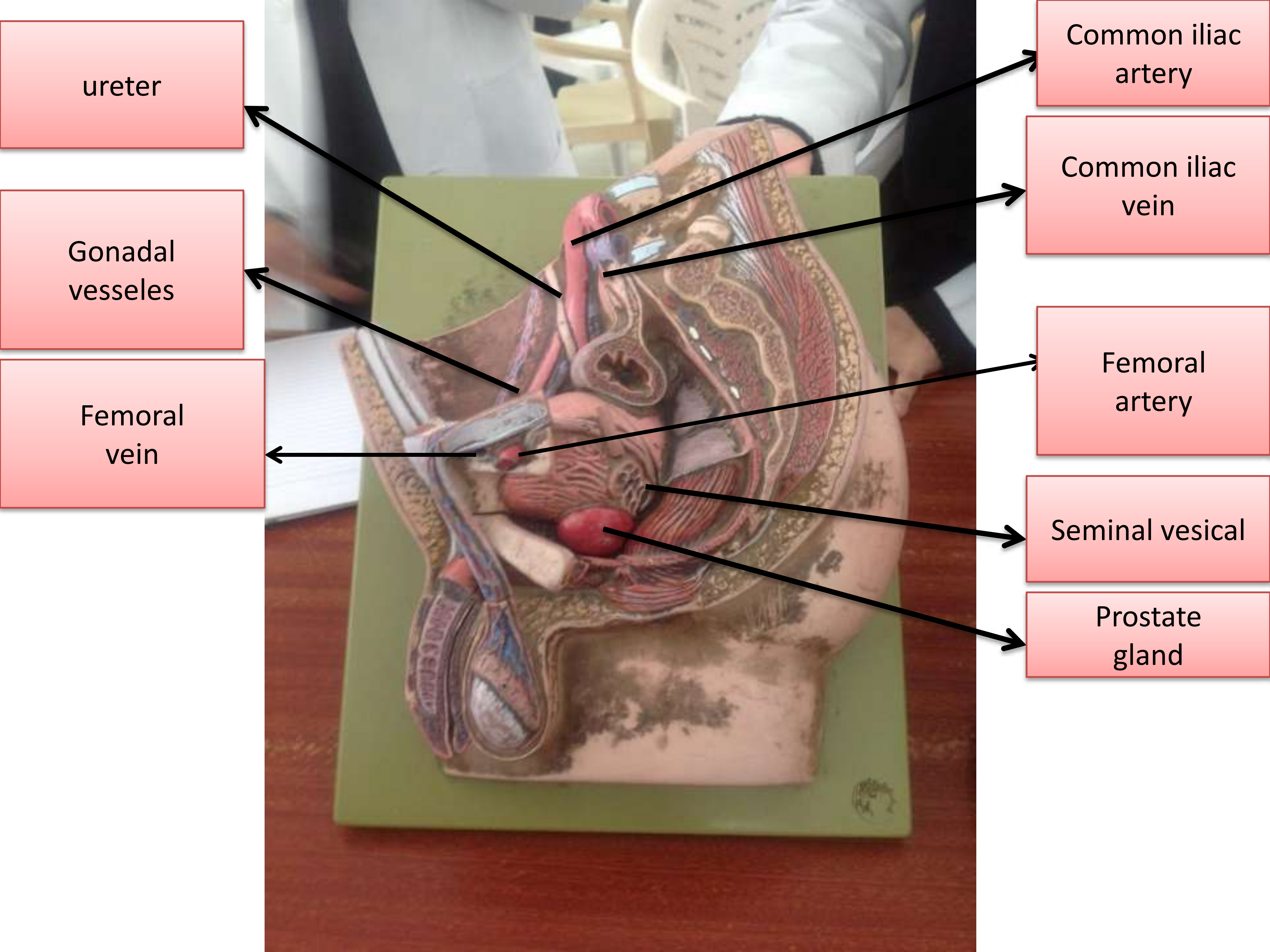
Terminal fossa Of urethra (naviculr foosa)

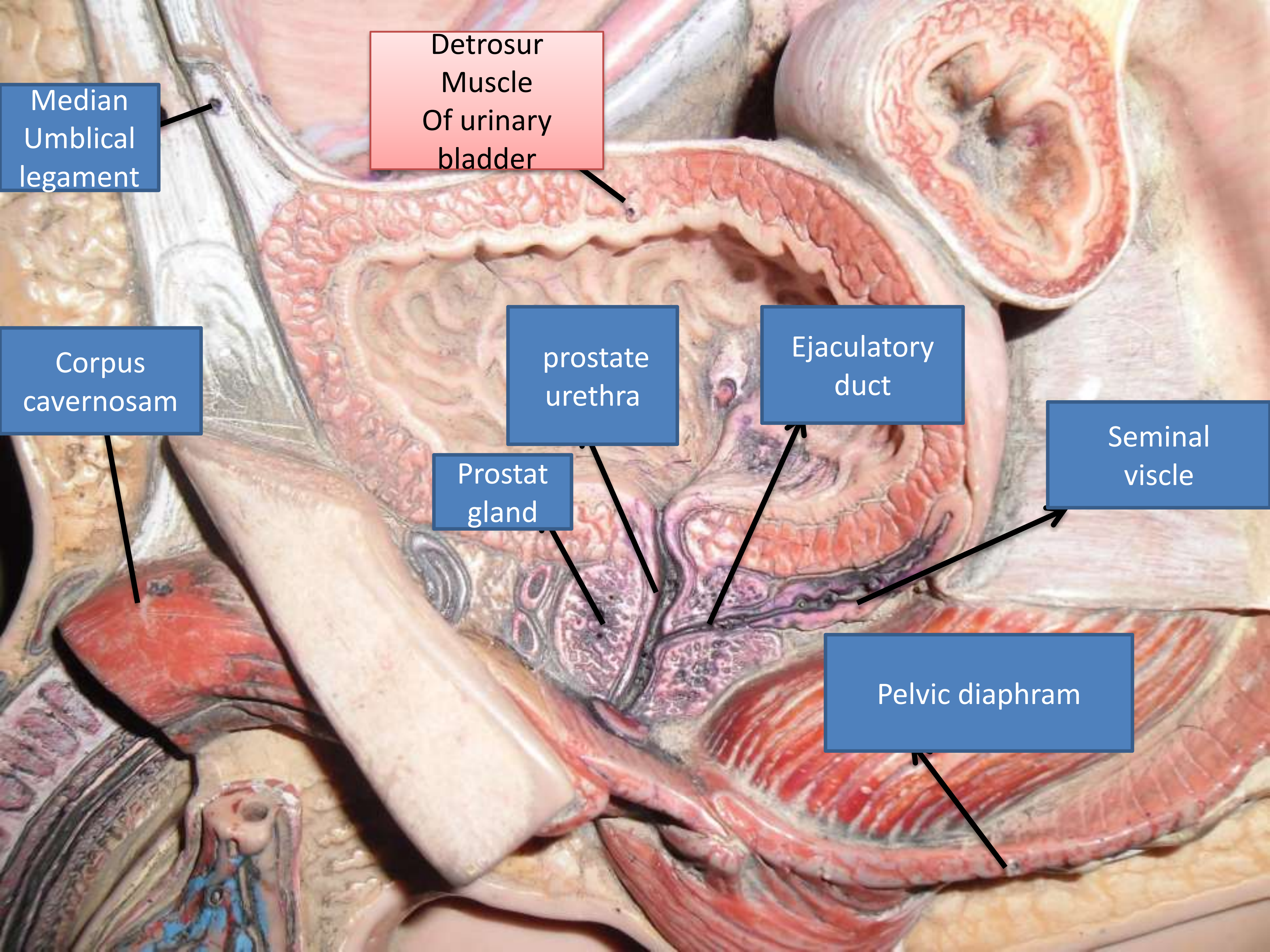
Gluteal muximus muscle

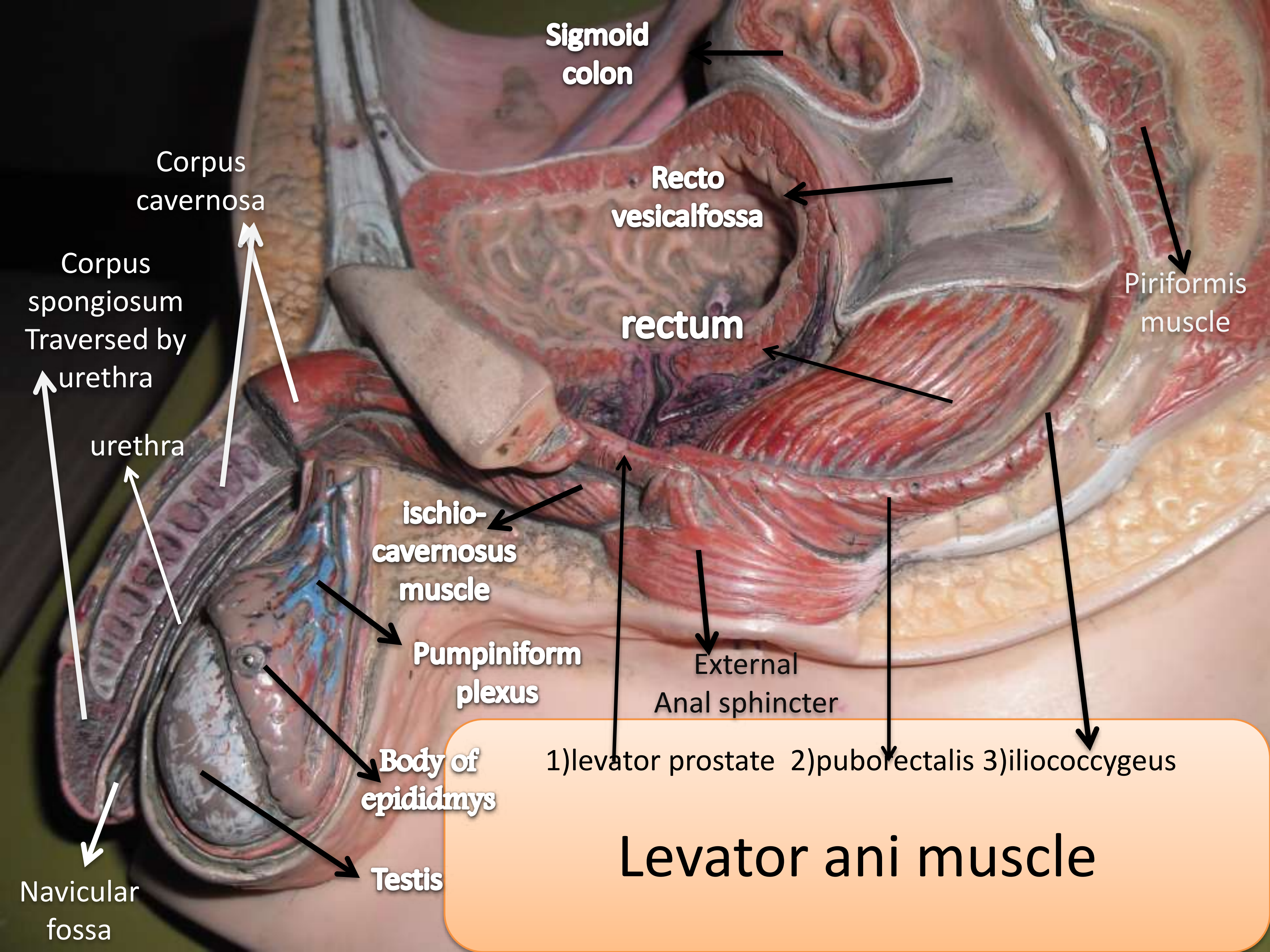
Sacrum bone

Recto veiscal pouch

Rectum

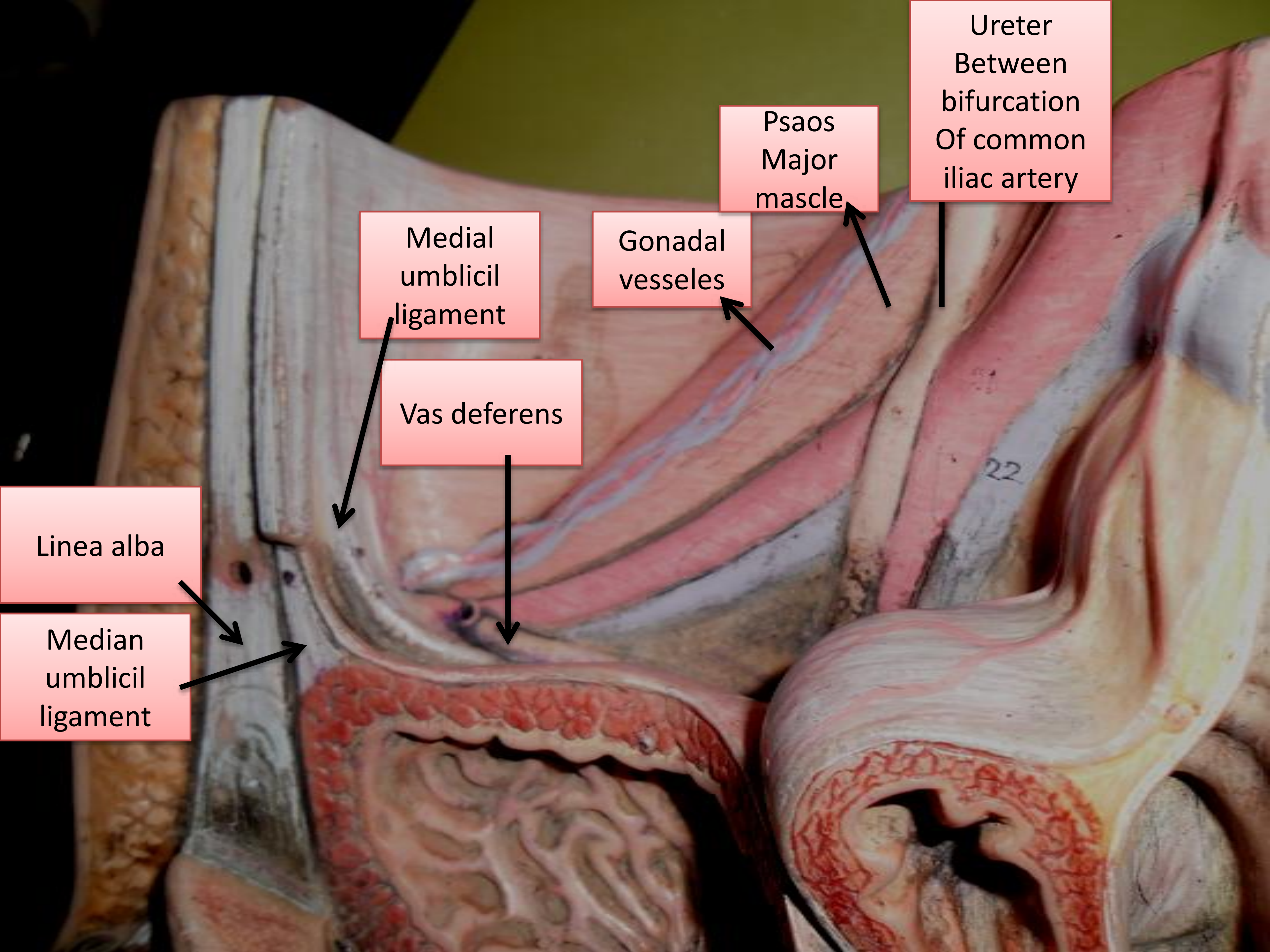

ureter
Gonadal vesseles
Femoral vein
Common iliac artery
Common iliac vein
Femoral artery
Seminal vesical
Prostate gland


Detrosur Muscle Of urinary bladder
Median Umblical legament
Corpus cavernosam
prostate urethra
Ejaculatory duct
Seminal viscle
Prostat gland
Pelvic diaphram


Sigmoid colon
Corpus cavernosa
Recto vesicalfossa
Corpus spongiosum Traversed by urethra
rectum
Piriformis muscle
urethra
ischio-cavernosus muscle
Pumpiniform plexus
External Anal sphincter
Body of epididmys
Testis
Navicular fossa

1)levator prostate 2)puborectalis 3)iliococcygeus

Levator ani muscle



Ureter
Between
bifurcation
Of common
iliac artery

Psaos
Major
mascle

Medial
umblicil
ligament

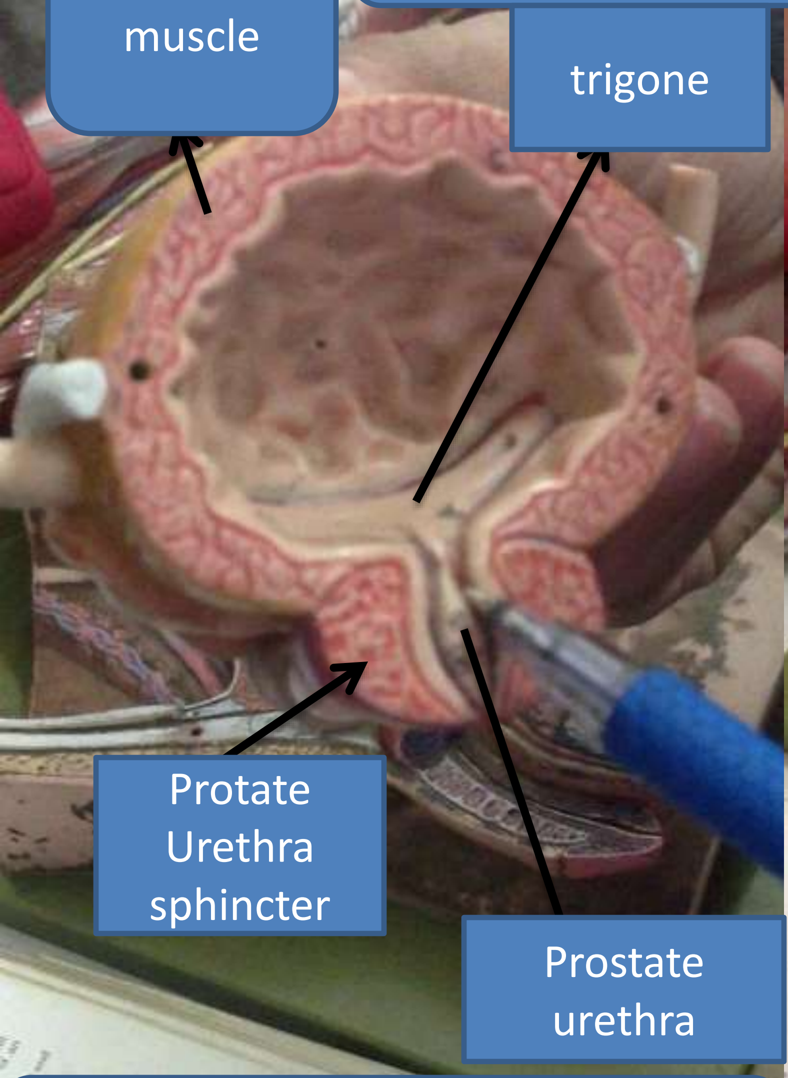
Gonadal
vesseles

Vas deferens

Linea alba

Median
umblicil
ligament

Urinary bladder



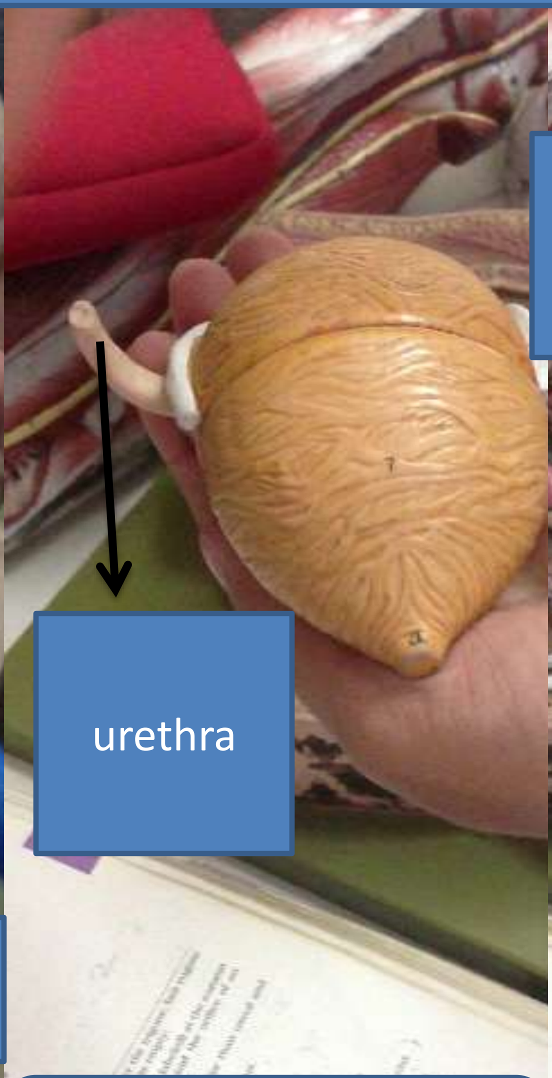
Detrusor muscle

trigone

Protate Urethra sphincter

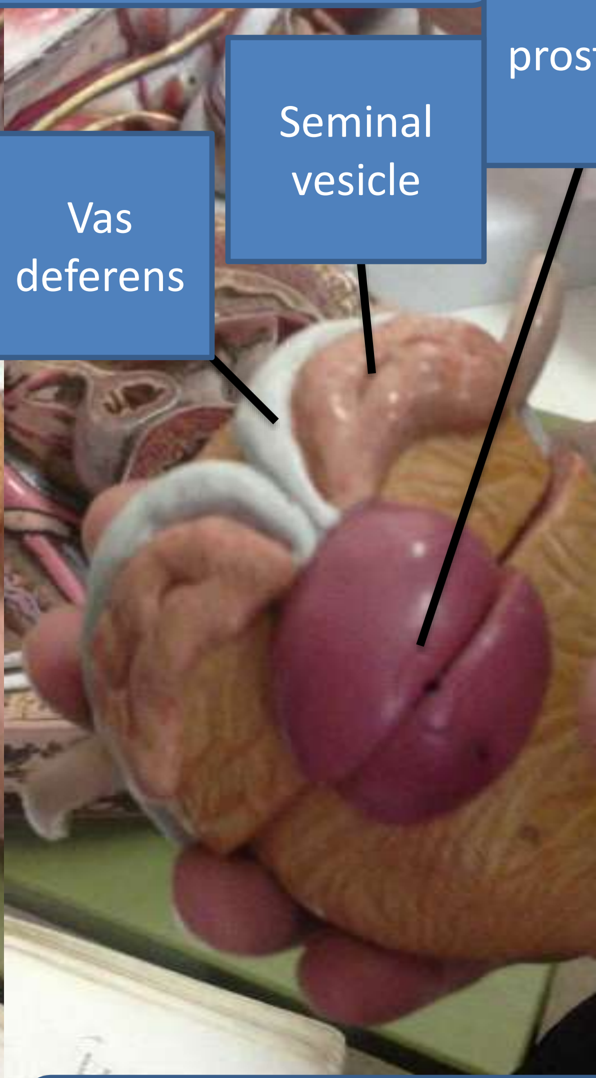
Prostate urethra

Internal view



urethra

Anterior view

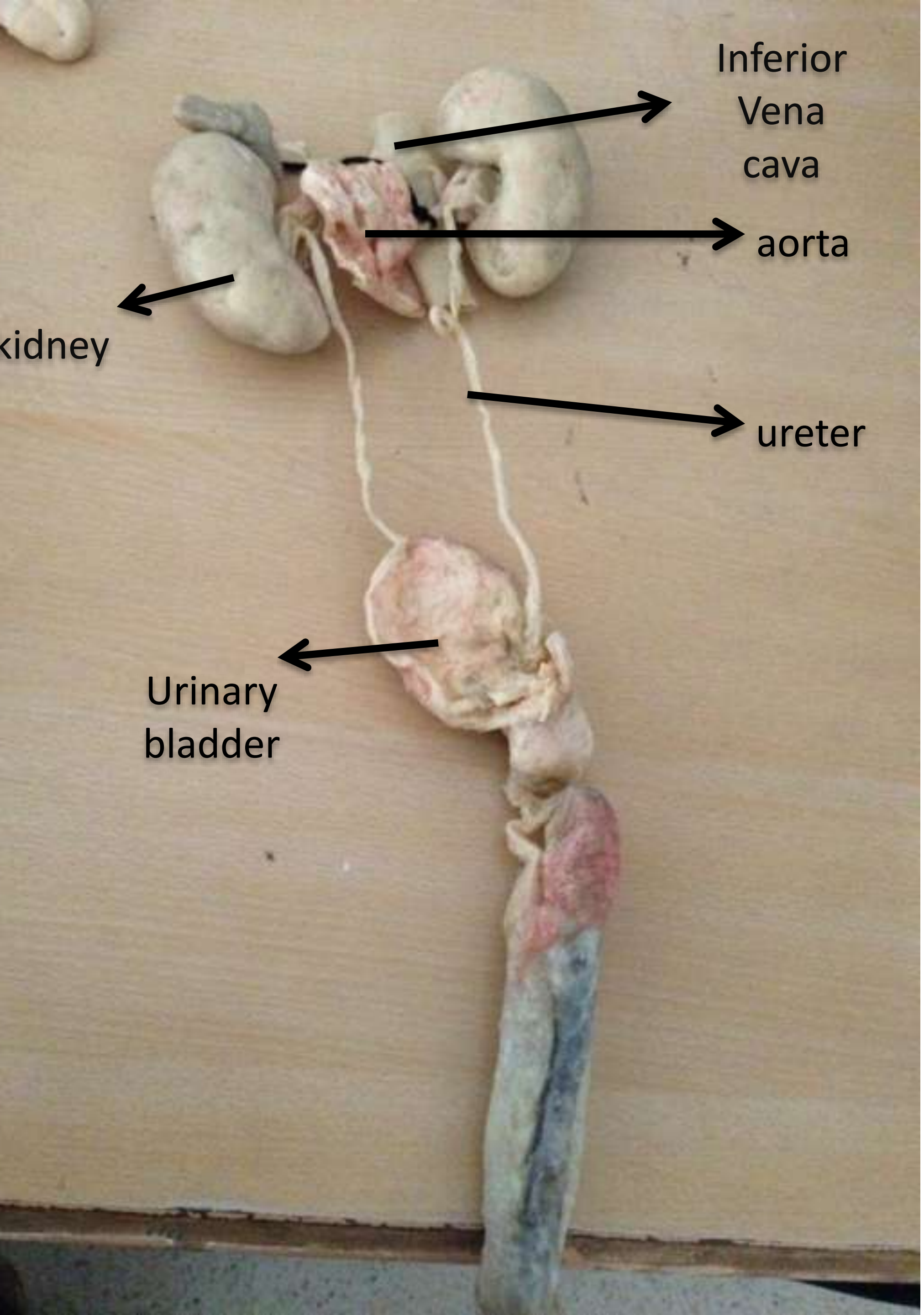


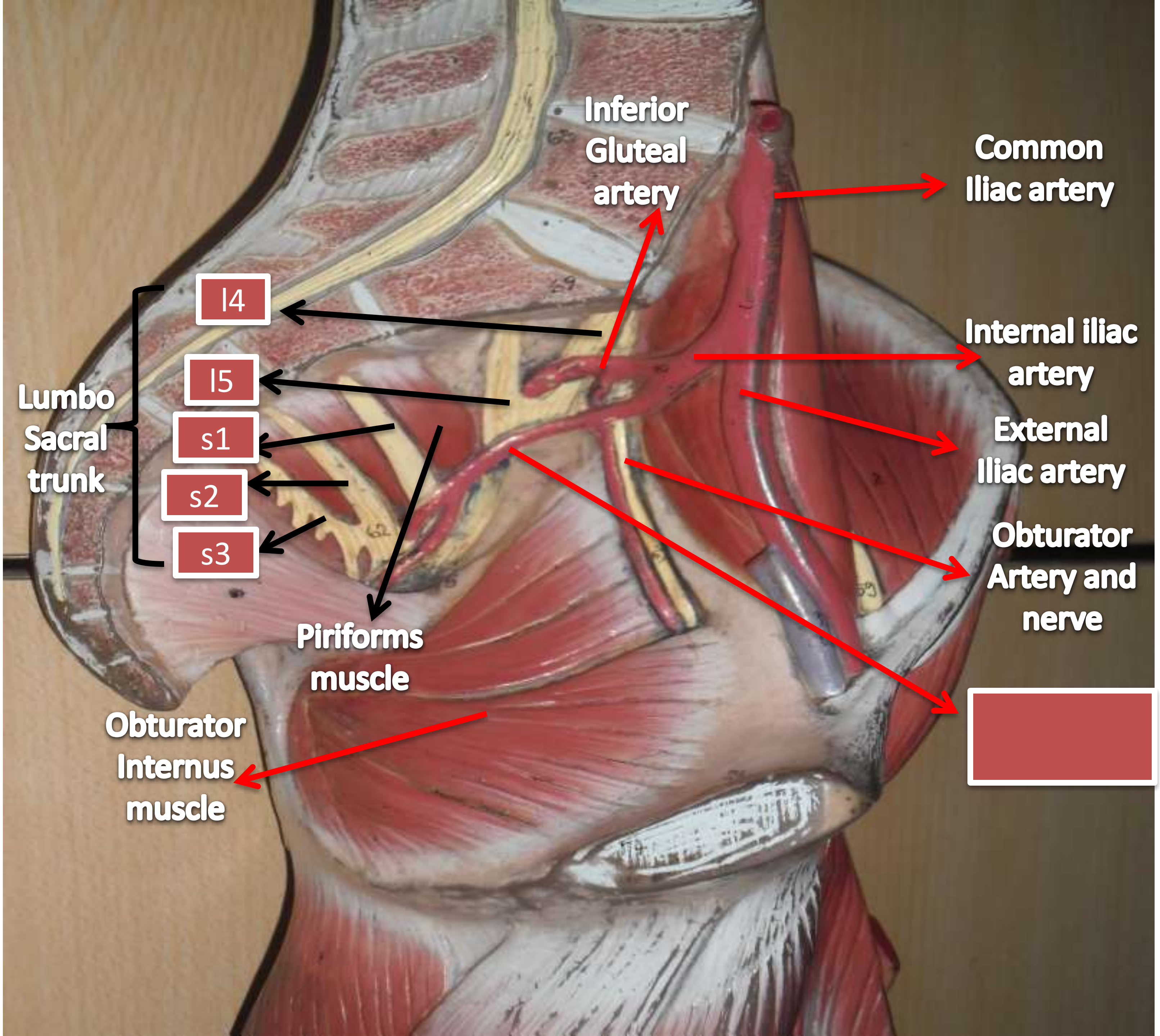
Vas deferens

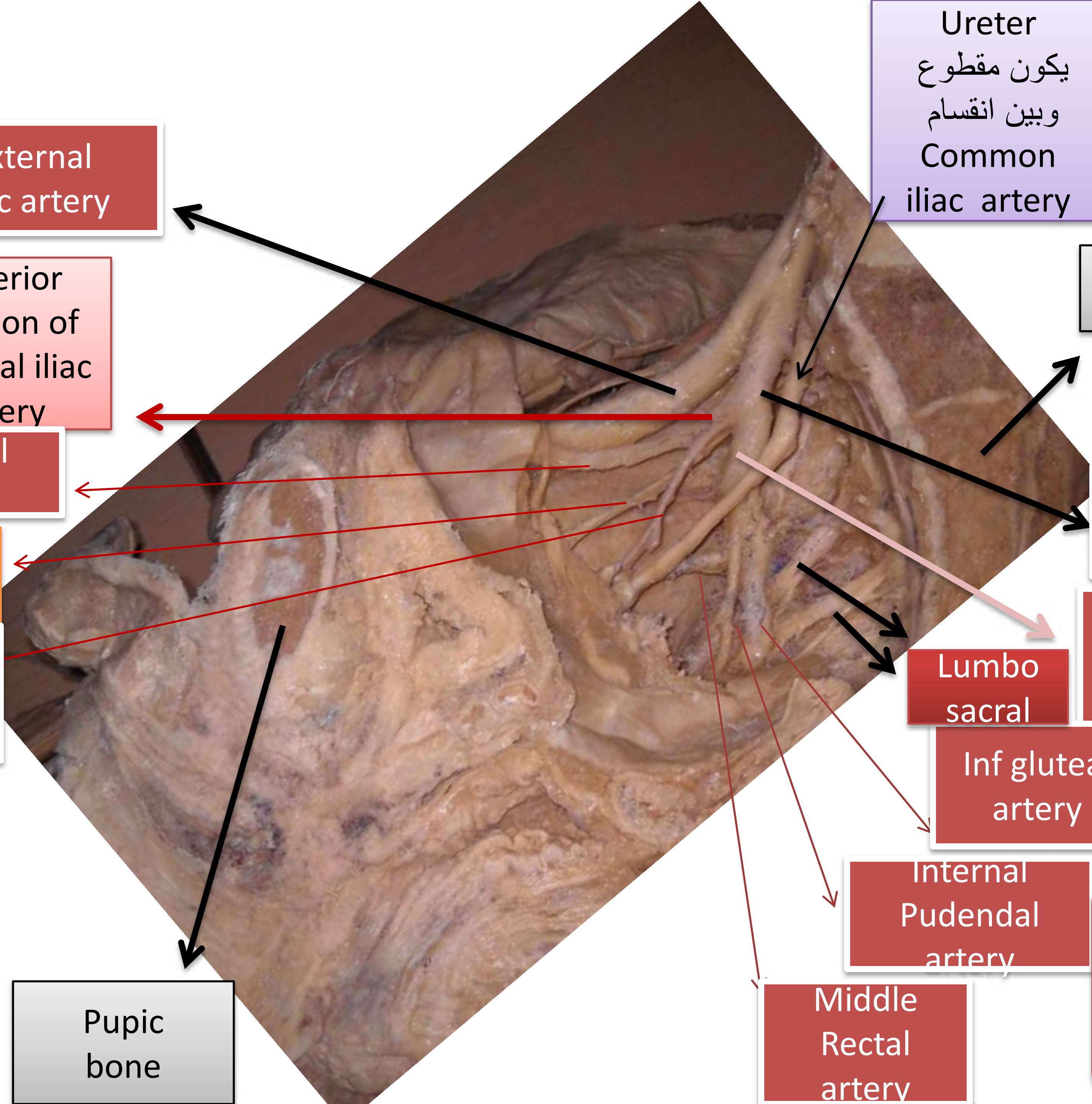
Seminal vesicle

prost

Posterior view


Inferior Vena cava
aorta
kidney
ureter
Urinary bladder


Inferior Gluteal artery
Common Iliac artery
l4
l5
s1
s2
s3
Lumbo Sacral trunk
Internal iliac artery
External Iliac artery
Obturator Artery and nerve
Piriforms muscle
Obturator Internus muscle



External
Iliac artery

Anterior
Division of
internal iliac
artery

Umbilical
artery

Obturator
nerve

Obtrautor
Artery
يكون مقطوع

Pupic
bone

Ureter
يكون مقطوع
وبين انقسام
Common
iliac artery

sacrum

Internal
Iliac artery

Pos division
Of internal
Iliac artery

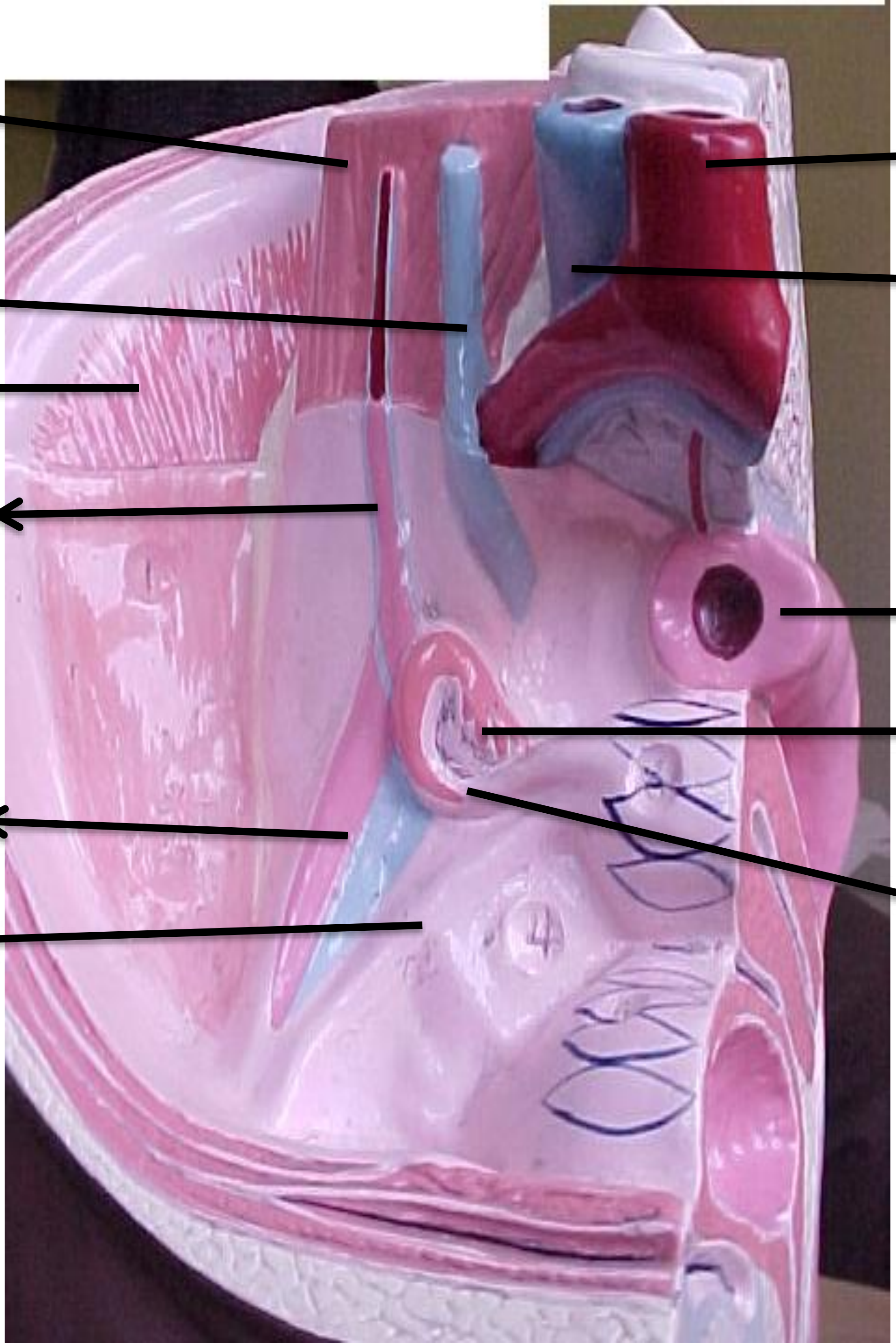
Lumbo
sacral

Inf gluteal
artery

Internal
Pudendal
artery

Middle
Rectal
artery

Branches
of post
divion



Psoas major muscle

wrong

Iliacus muscle

Gonadal vessles
Ovarine vessels

External iliac vessels

Round ligament

Common Iliac artery

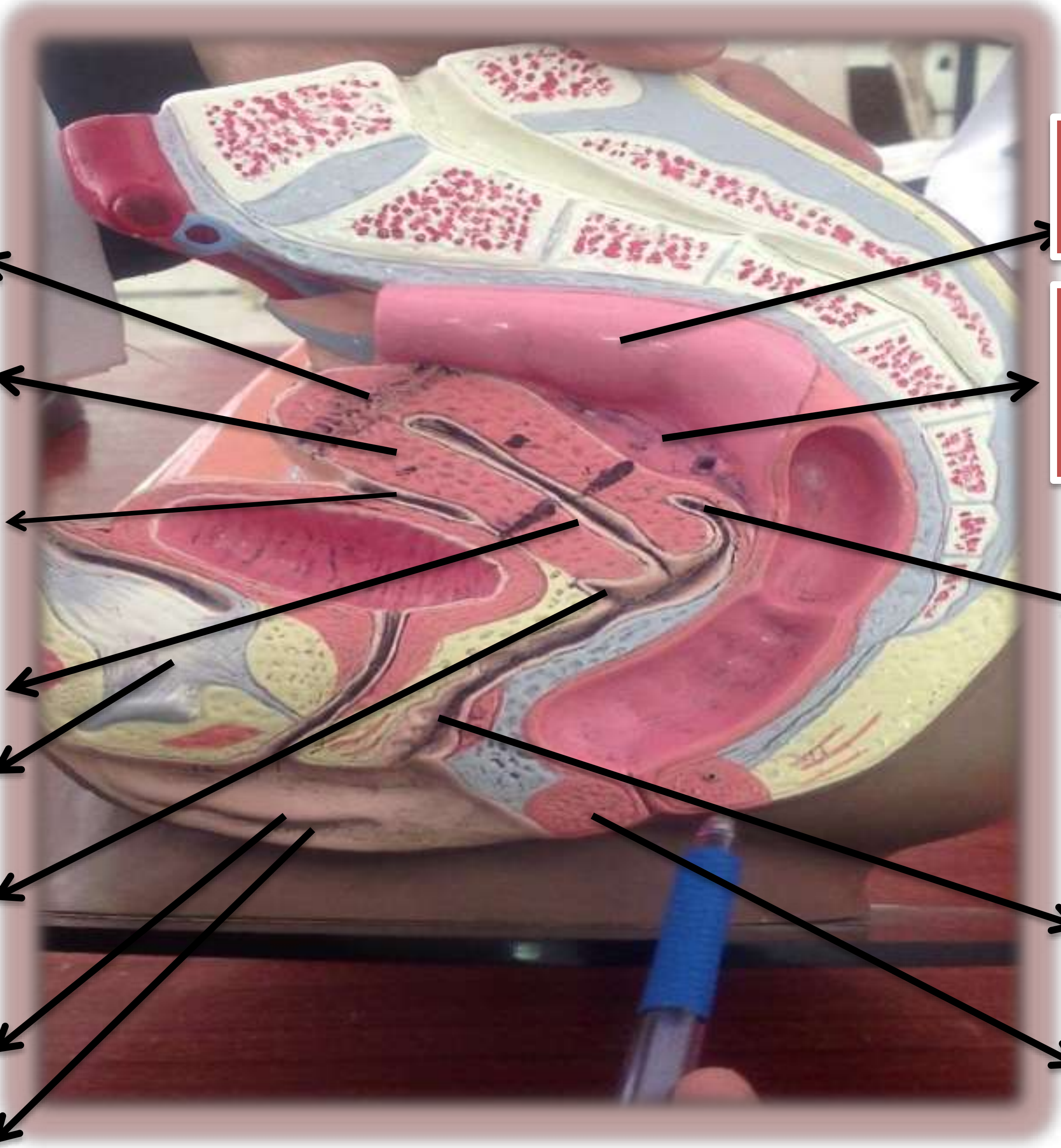
Common iliac vein

rectum

Ovarian Fimbria

Uterine tube

Uterine tube



Fundus of uterus

Body of uterus

Vesicouterine pouch

Cervix of uterus

Pubic symphysis

Anterior Vaginal fornix

Labia minora

Labia majora

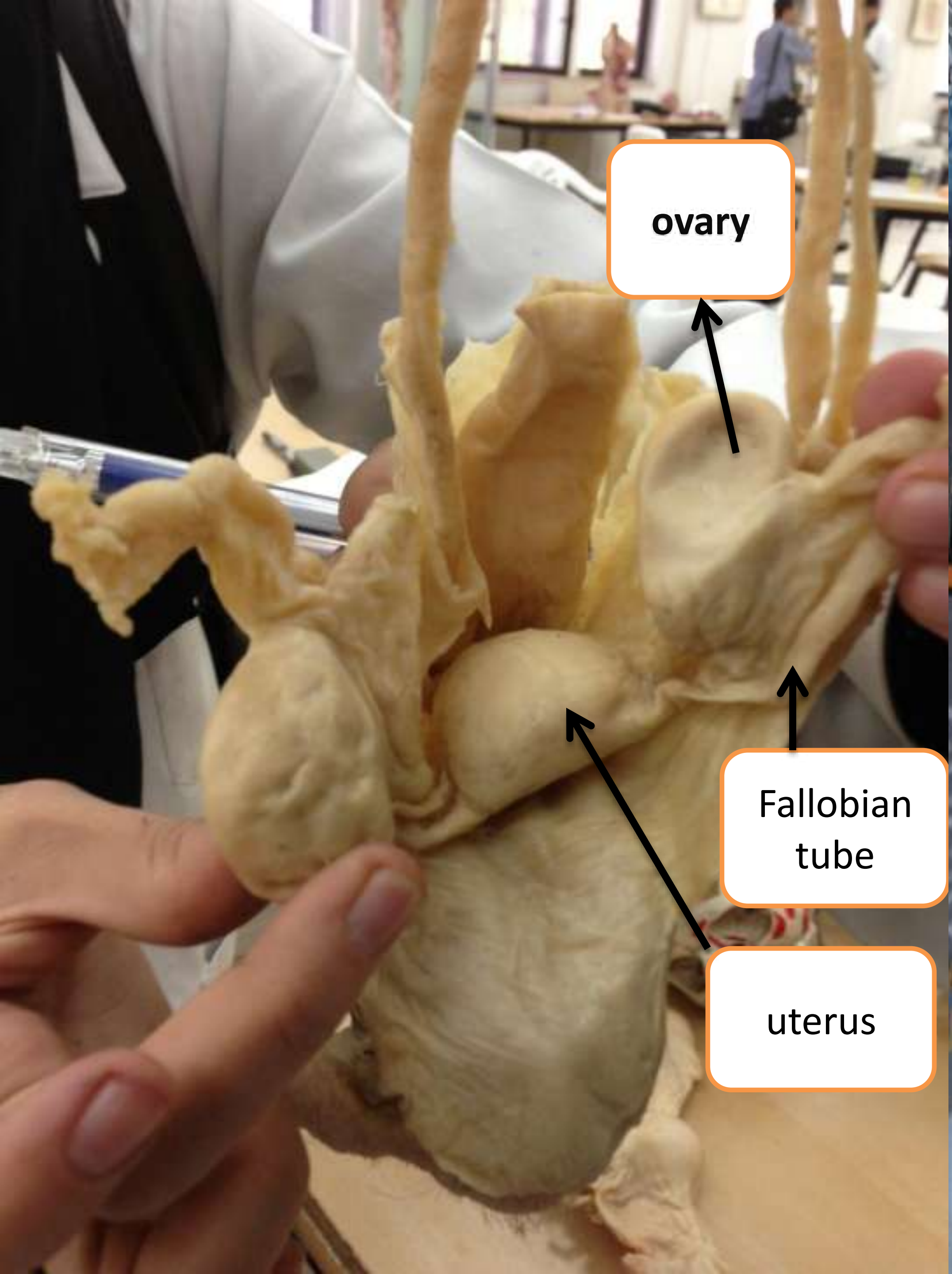
rectum

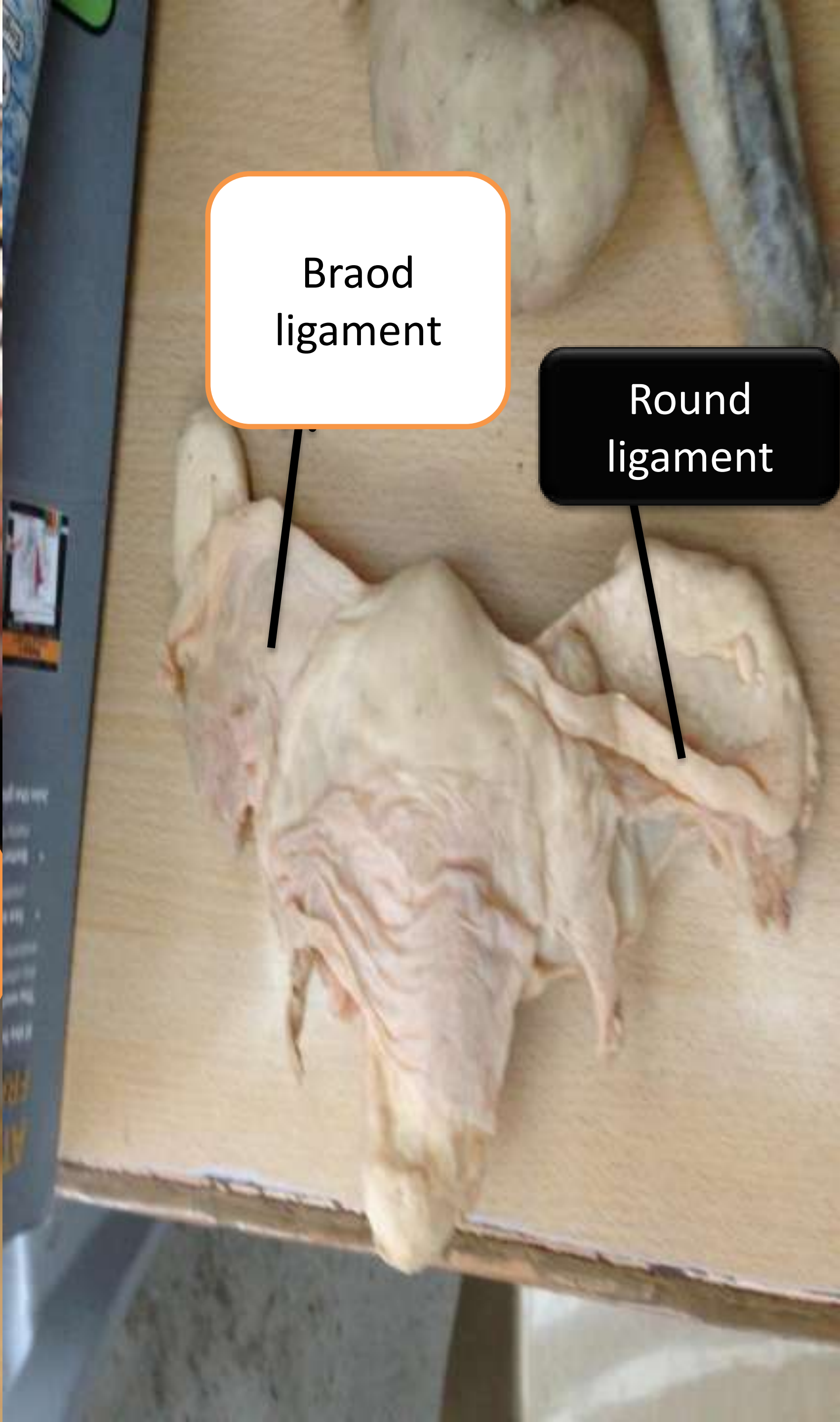
(Douglus Pouch) Rectouterine pouch

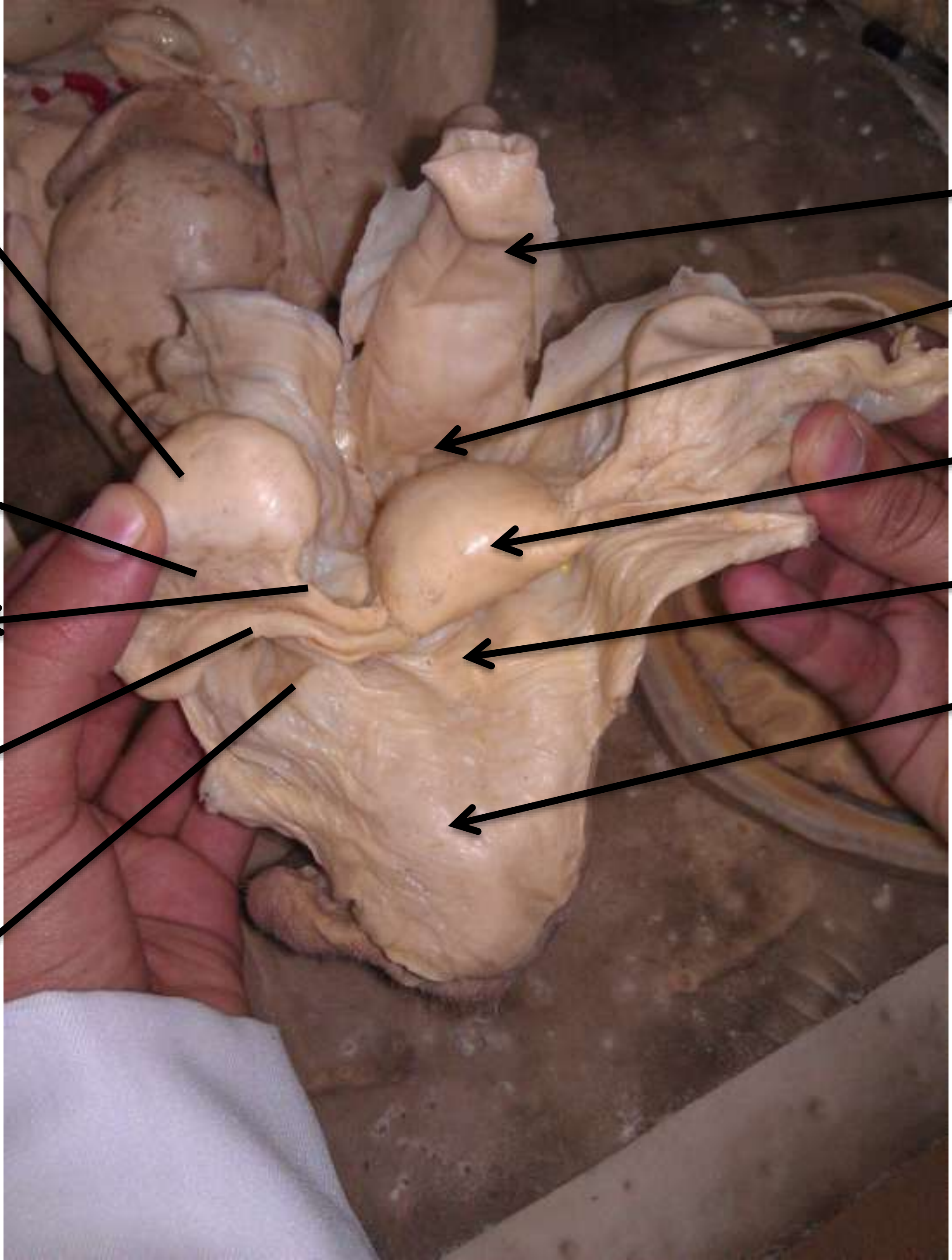
Posterior vaginal fornix

vagina

External anal sphincter


ovary
Fallobian tube
uterus


Braod ligament
Round ligament



ovary

Meso-ovarine
Part of braod
ligament
between
ovary and
uterine tube

Ovarine ligamen
Between ovary
and uterus

Uterine
Tube
مع التركيز على أجزاء
الفالوبيان

Meso-utarine
Part also of
braod ligament

rectum

Recto-utarine
pauch

uterus

Utro vasical
pauch

Urinary
bladder

Abdomen

1) Body: large in size ,kidney

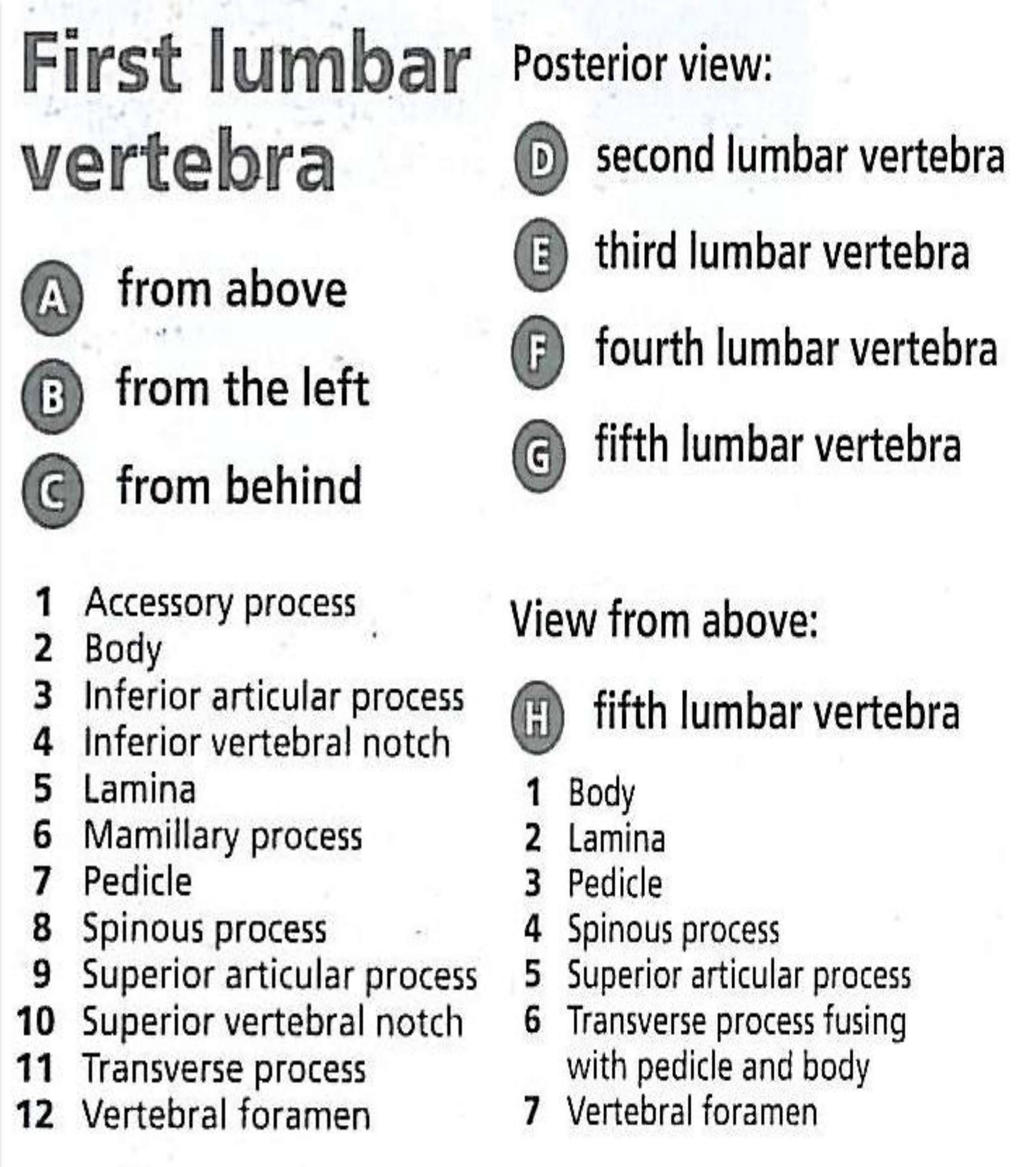
shaped has on costal facets

2) Vertebral foramen :is small in size & triangular in out line

3) Transver porcess: is flat and longated

4) Spine : is quadrilateral and projects directly backward

The fifth lumbar vertebra differs from the rest in having a thick strong transverse process which attched to pedicle



First lumbar vertebra

Ⓐ from above
Ⓑ from the left
Ⓒ from behind

1 Accessory process
2 Body
3 Inferior articular process
4 Inferior vertebral notch
5 Lamina
6 Mamillary process
7 Pedicle
8 Spinous process
9 Superior articular process
10 Superior vertebral notch
11 Transverse process
12 Vertebral foramen

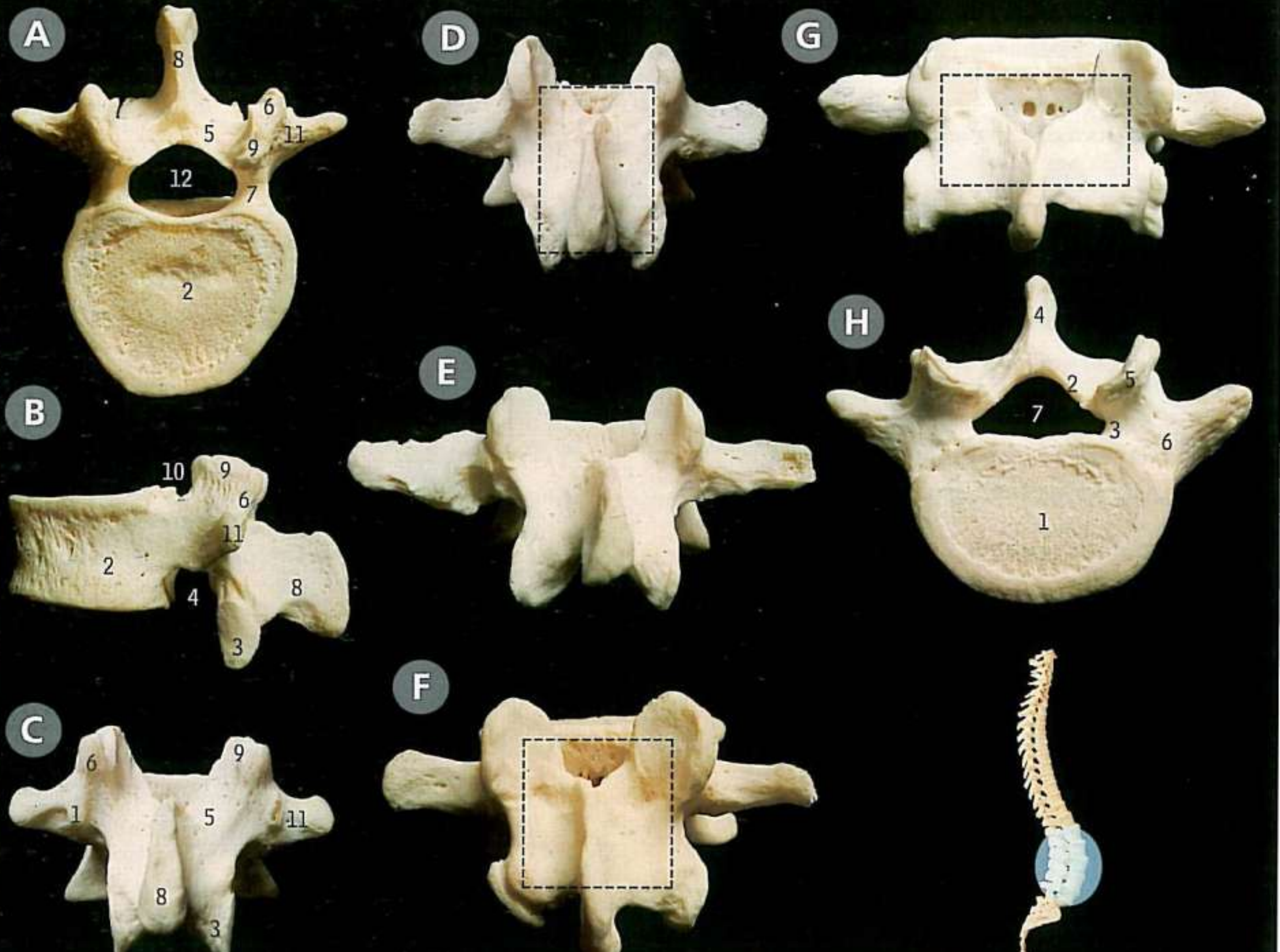
Posterior view:

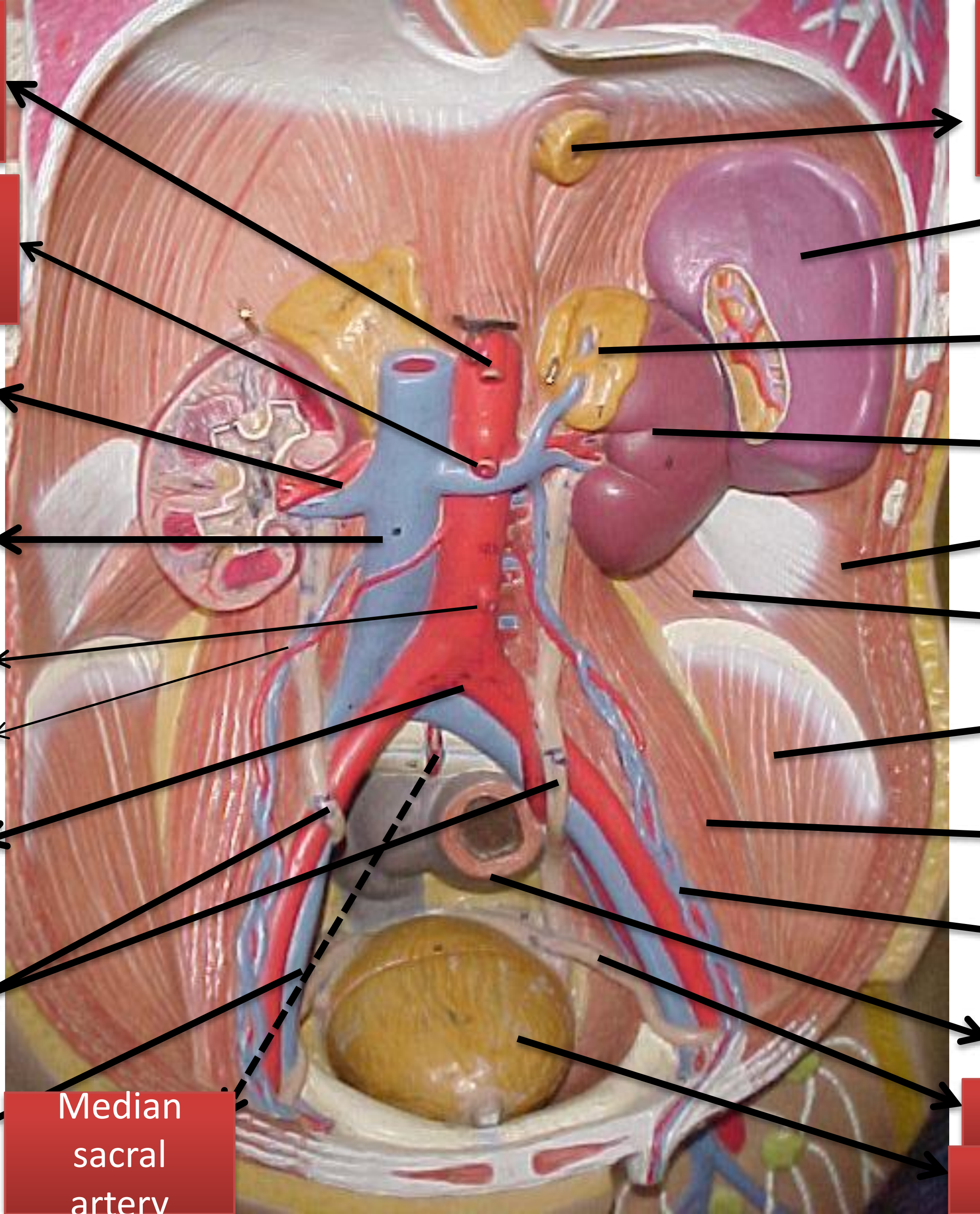
Ⓓ second lumbar vertebra
Ⓔ third lumbar vertebra
Ⓕ fourth lumbar vertebra
Ⓖ fifth lumbar vertebra

View from above:

Ⓗ fifth lumbar vertebra

1 Body
2 Lamina
3 Pedicle
4 Spinous process
5 Superior articular process
6 Transverse process fusing with pedicle and body
7 Vertebral foramen


A
8
6
5
11
9
12
7
2
B
10
9
6
11
2
4
8
3
C
6
9
1
5
11
8
3
D
E
F
G
H
4
2
5
7
3
6
1



Coeliac trunk at level of upper border of L1

Sup mesenteric artery at level of lower borderof L1

Renal vesseles

Inferior vena cava

Inf mesenteric artery at level of L3

Gonadal vessels

Bifurcation of aorta at level of L4

Ureter in the bifurcation of common iliac artery

Commo iliac vessels

Median sacral artery

Oesophagus And it is opening in diaphragm T12

Spleen with it is vessels

Supra renal gland with it is vessels

Left kidney

Origin of tranversus m

Quadratus m

Iliacus muscle

Psaos major muscle

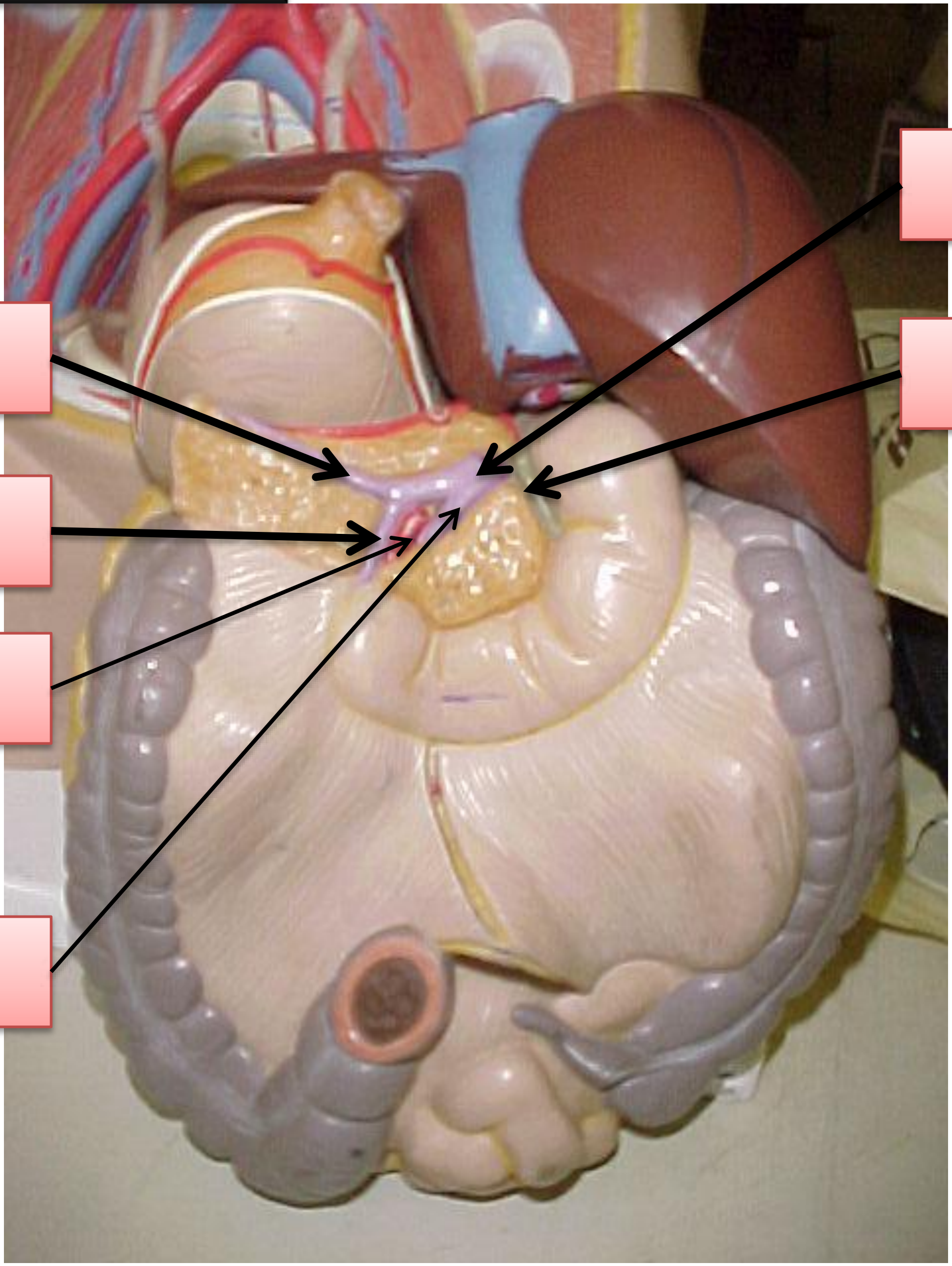
Gonadal vesseles

Sigmoid colon

Vas defrenes

Urinary bladder

post.



Portal v.

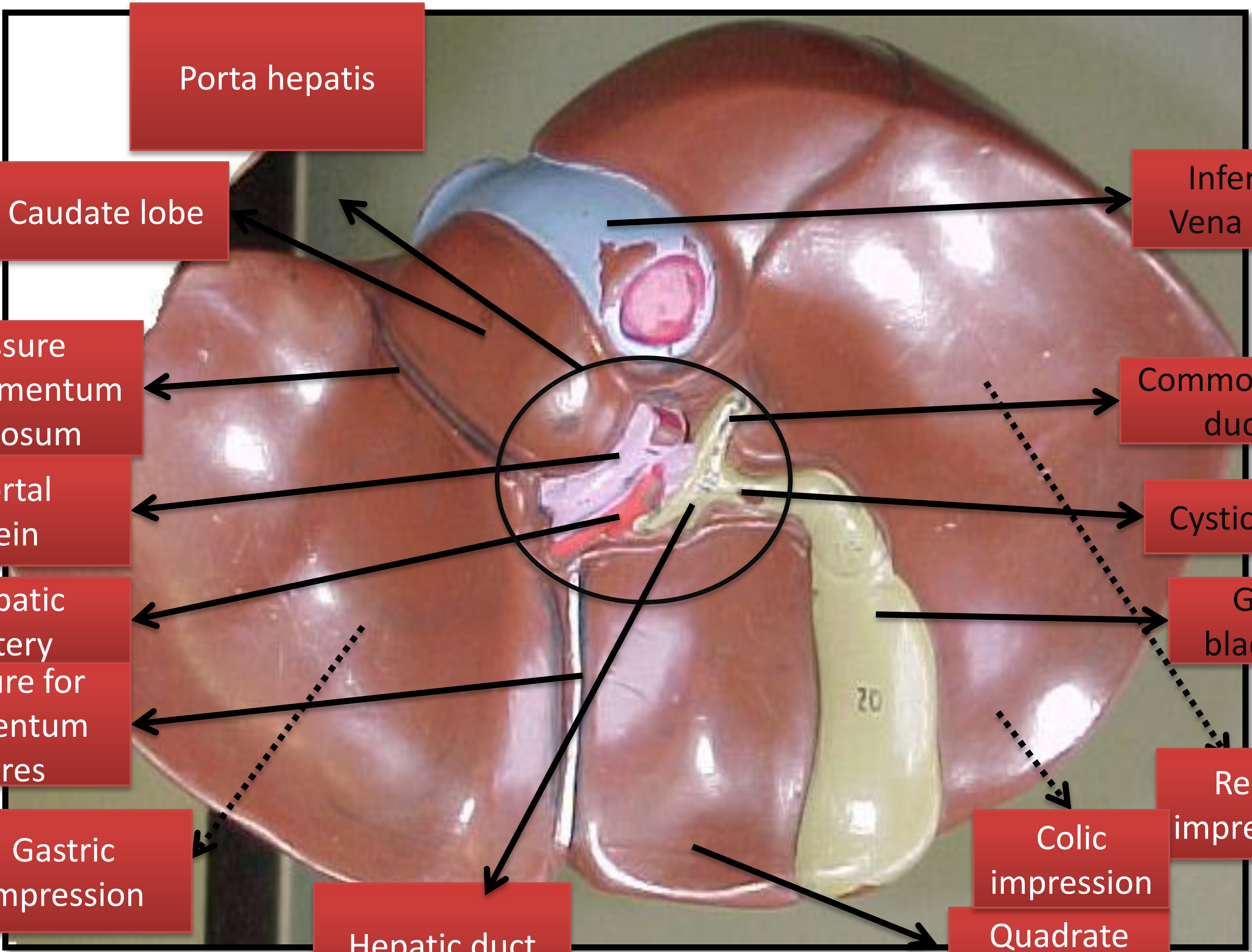
Common bile duct

Splinc v.

Inf mesentric v.

Inf mesentric a.

Sup. Mesentric v.



Porta hepatis

Caudate lobe

Fissure
For ligmentum
venosum

Portal
vein

Hepatic
artery

Fissure for
ligmentum
teres

Gastric
impression

Hepatic duct

Inferior
Vena cava

Common bile
duct

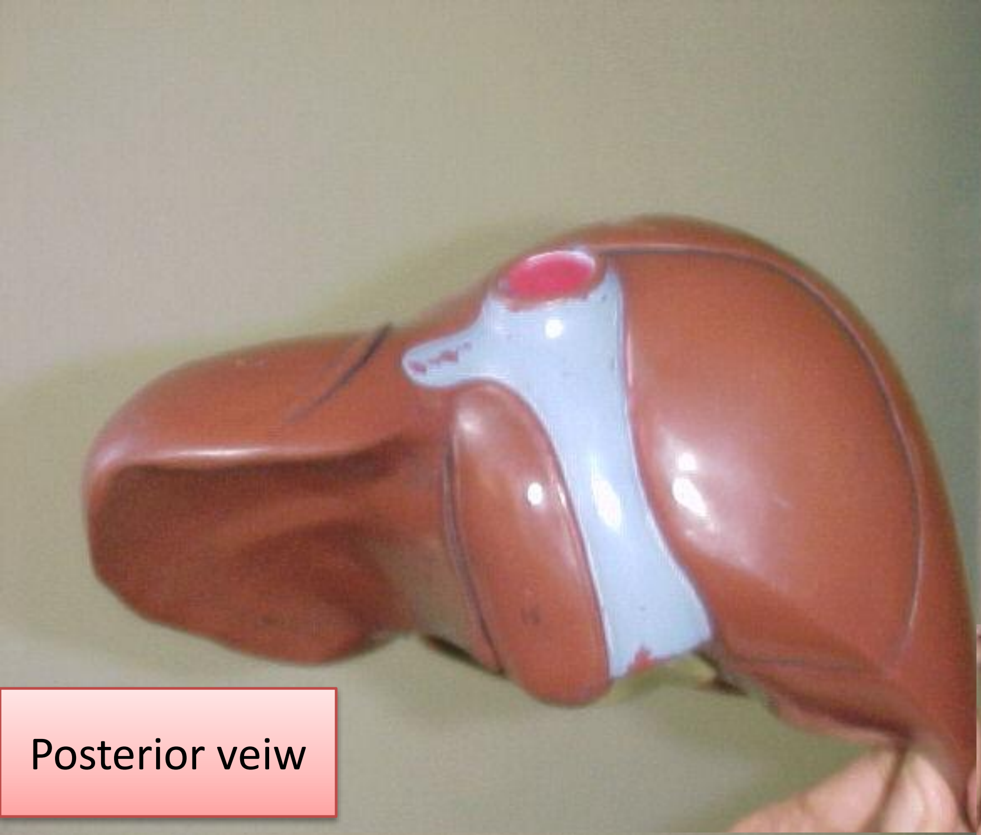
Cystic duct

Gall
bladder

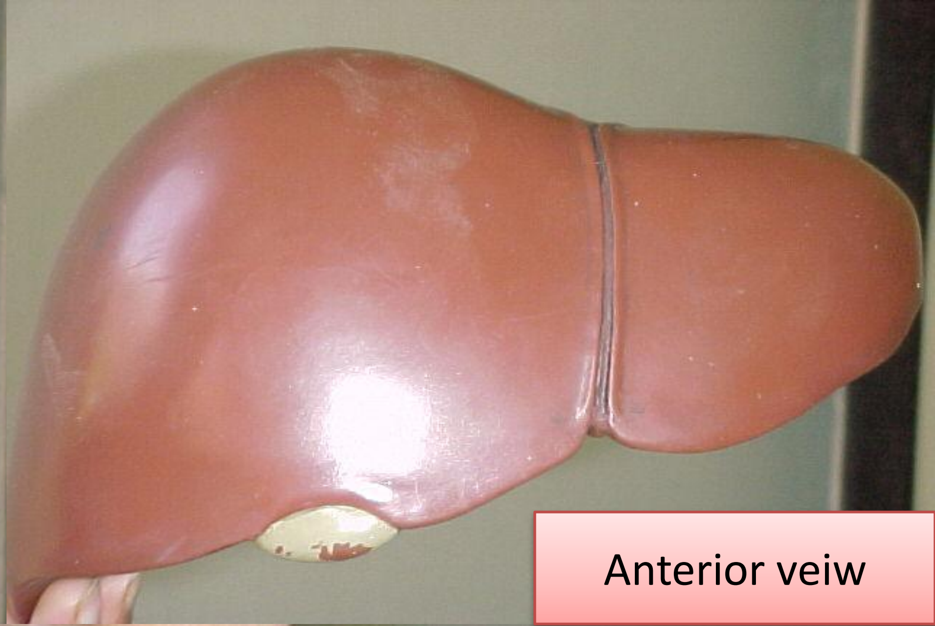
Renal
impression

Colic
impression

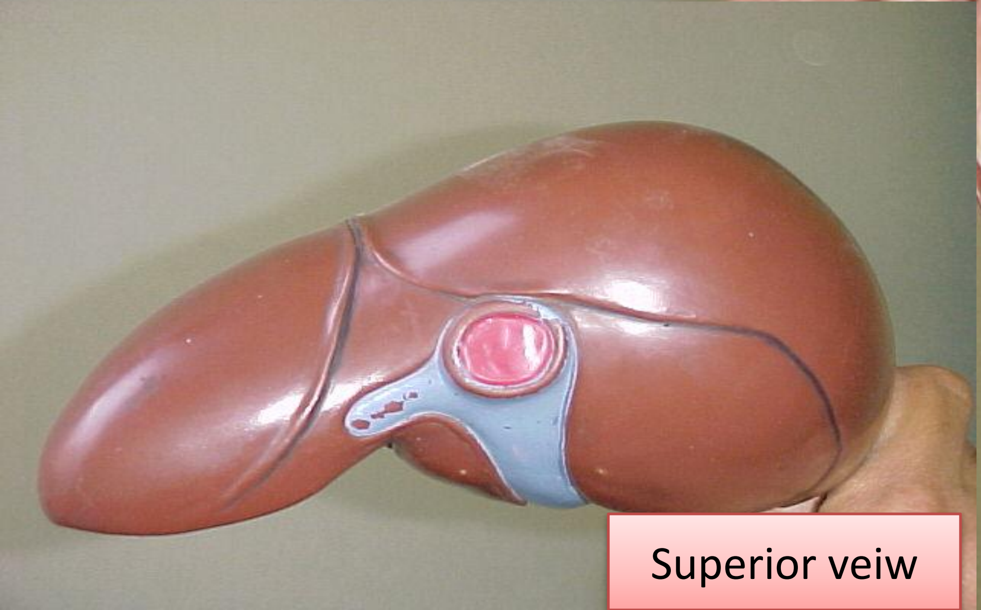
Quadrate
lobe



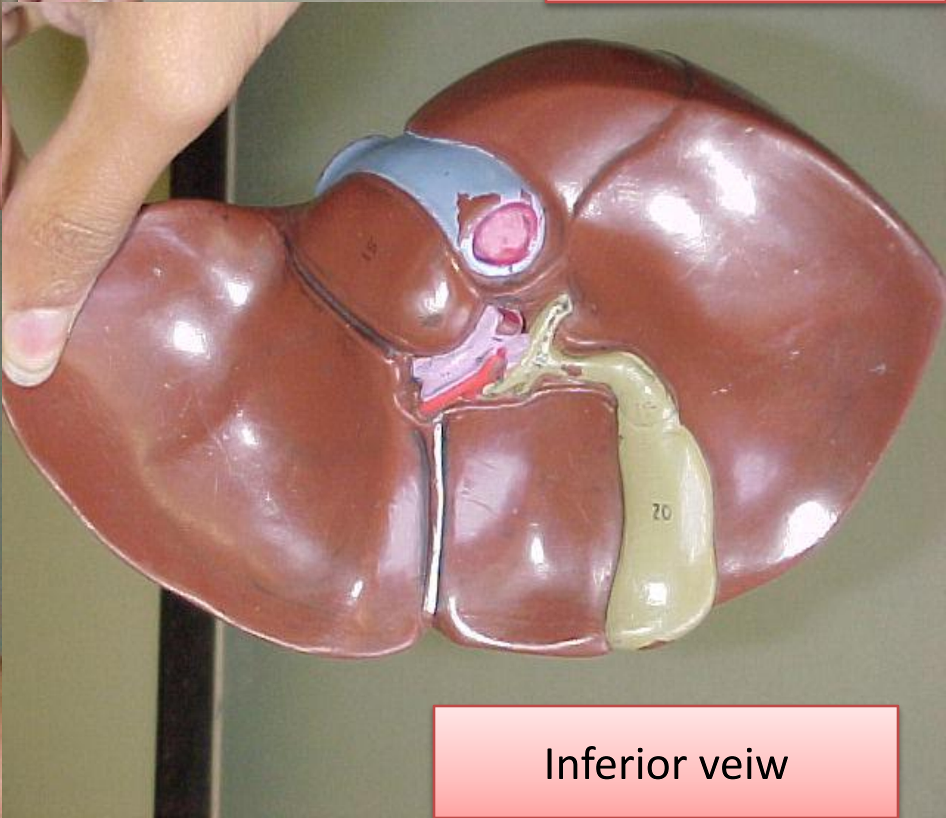
Posterior veiw



Anterior veiw

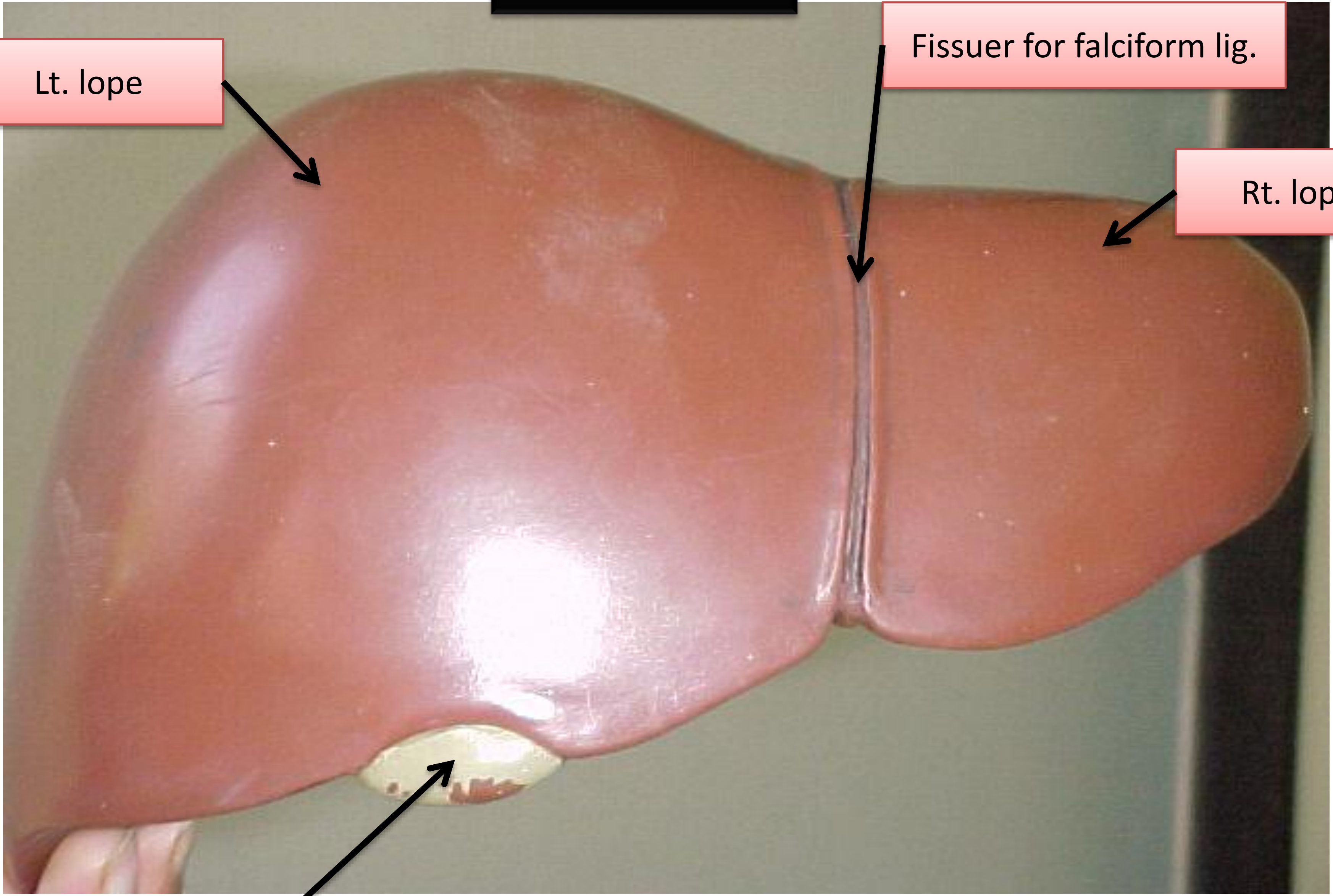


Superior veiw



Inferior veiw

Anterior veiw



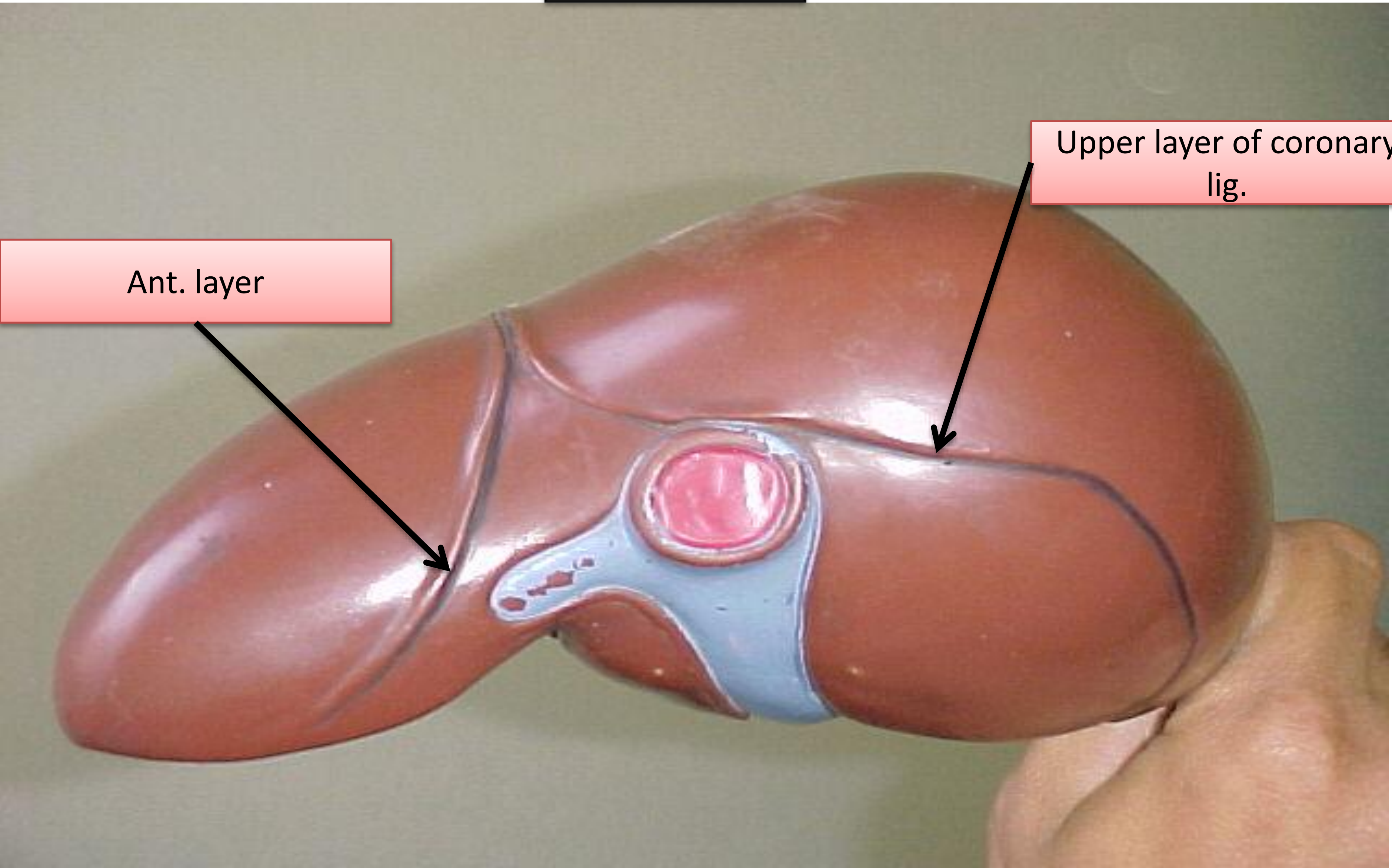
Lt. lope

Fissuer for falciform lig.

Rt. lope

Fundus of gall bladder

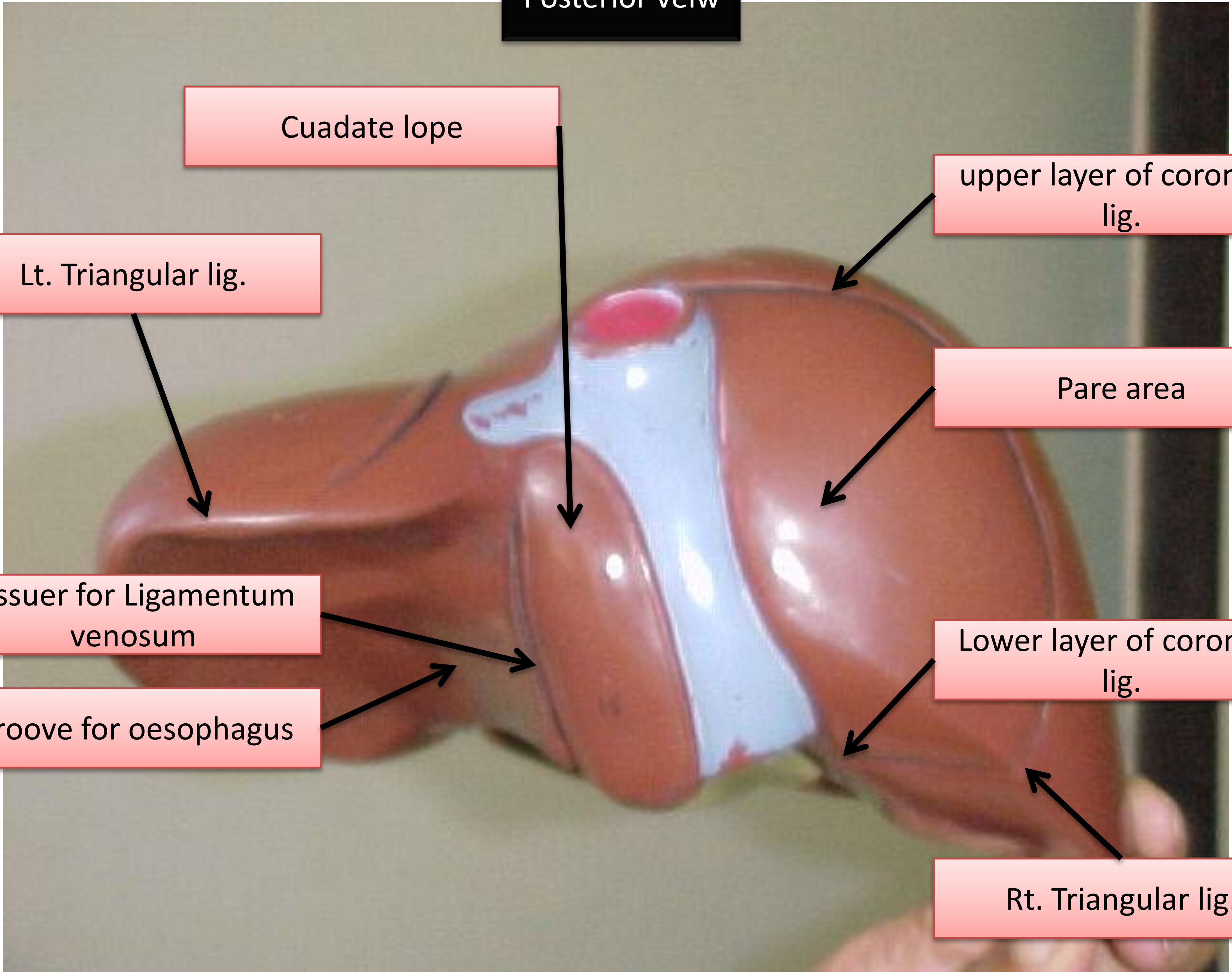
Superior veiw



Ant. layer

Upper layer of coronary lig.

Posterior veiw



Cuadate lope

upper layer of coronary lig.

Lt. Triangular lig.

Pare area

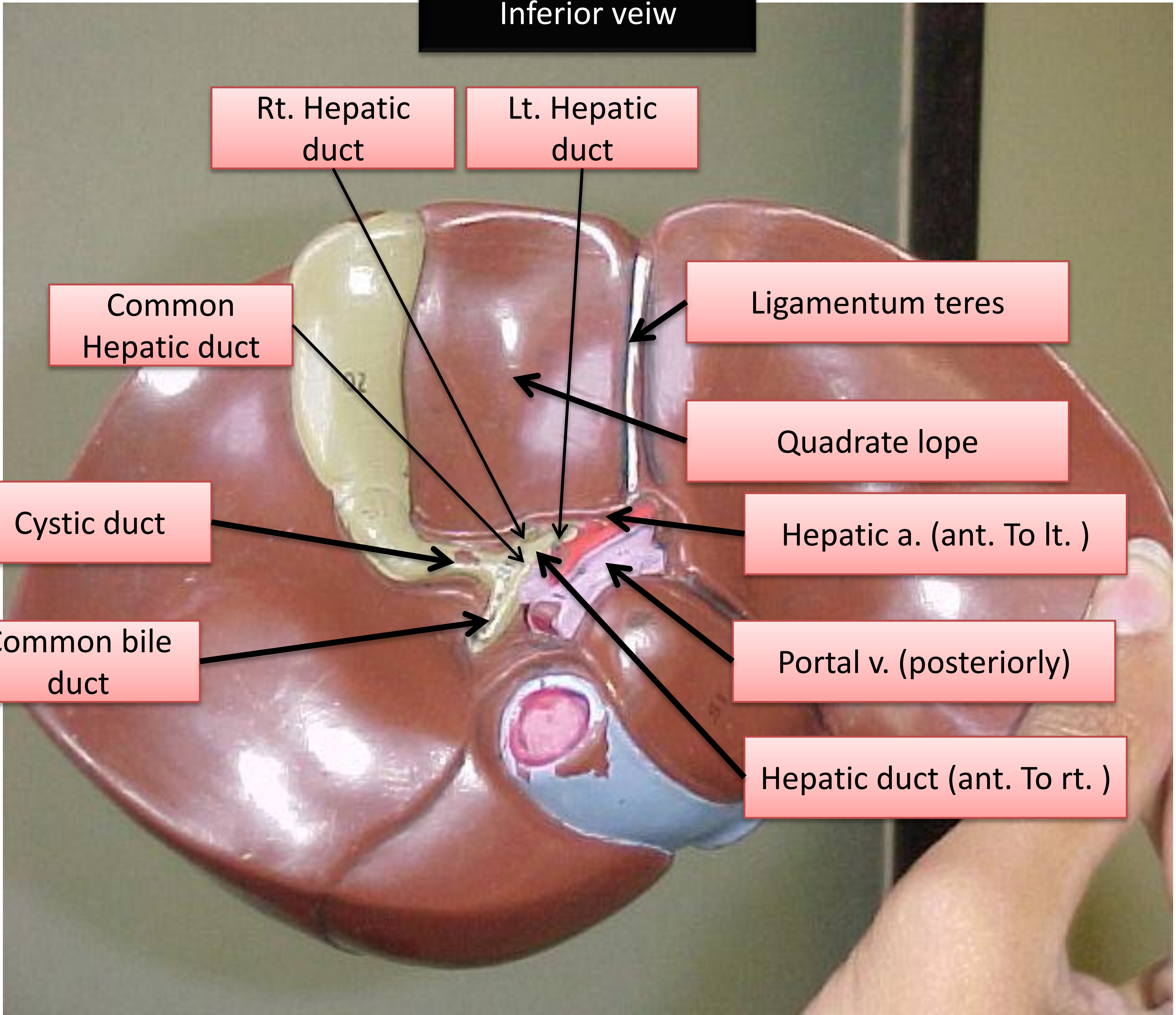
Fissuer for Ligamentum venosum

Lower layer of coronary lig.

Groove for oesophagus

Rt. Triangular lig.

Inferior veiw



Rt. Hepatic duct

Lt. Hepatic duct

Common Hepatic duct

Ligamentum teres

Quadrate lope

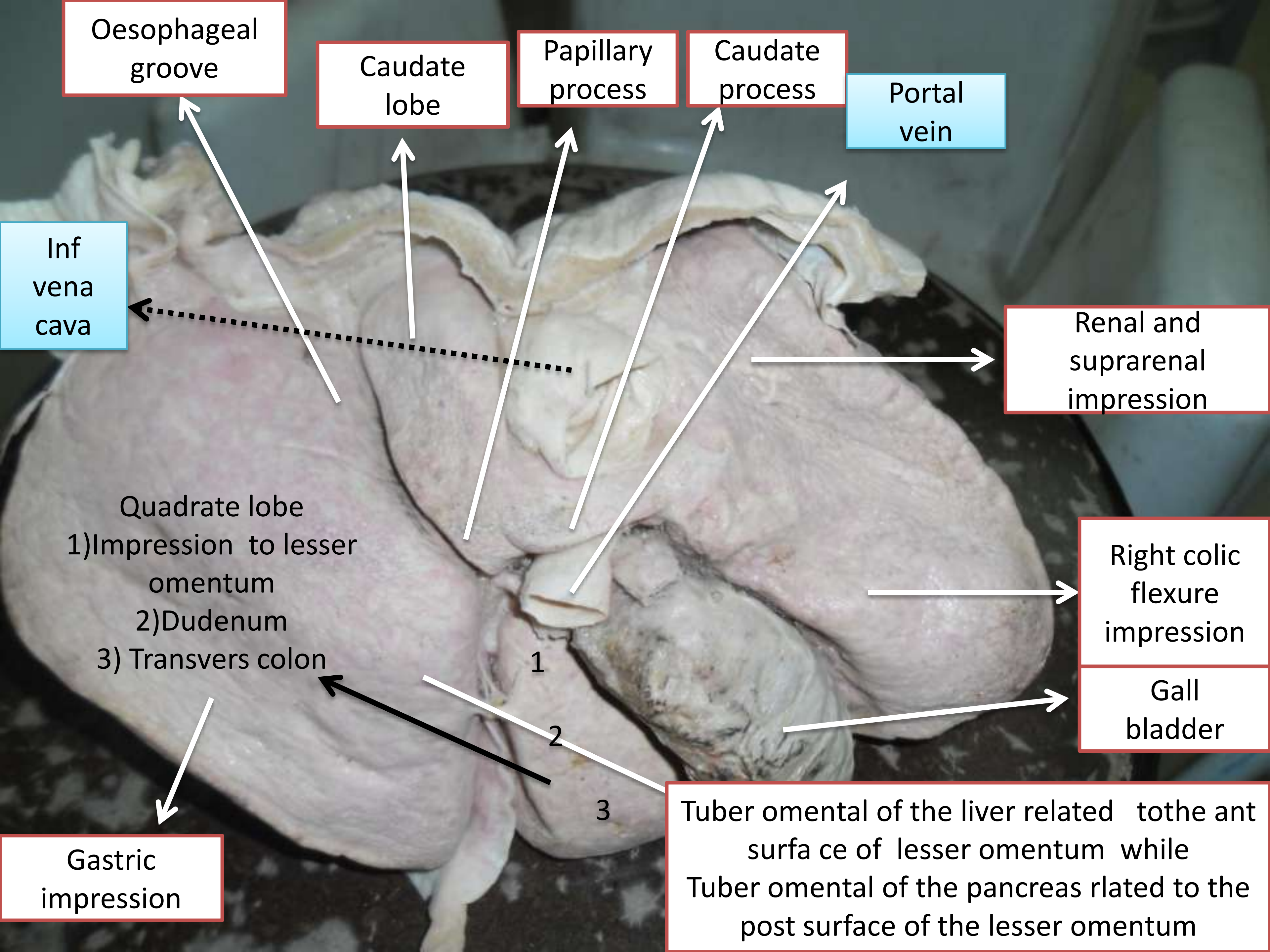
Cystic duct

Hepatic a. (ant. To lt.)

Common bile duct

Portal v. (posteriorly)

Hepatic duct (ant. To rt.)



Oesophageal groove

Caudate lobe

Papillary process

Caudate process

Portal vein

Inf vena cava

Renal and suprarenal impression

Quadrate lobe
1)Impression to lesser omentum
2)Dudenum
3) Transvers colon

Right colic flexure impression

Gall bladder

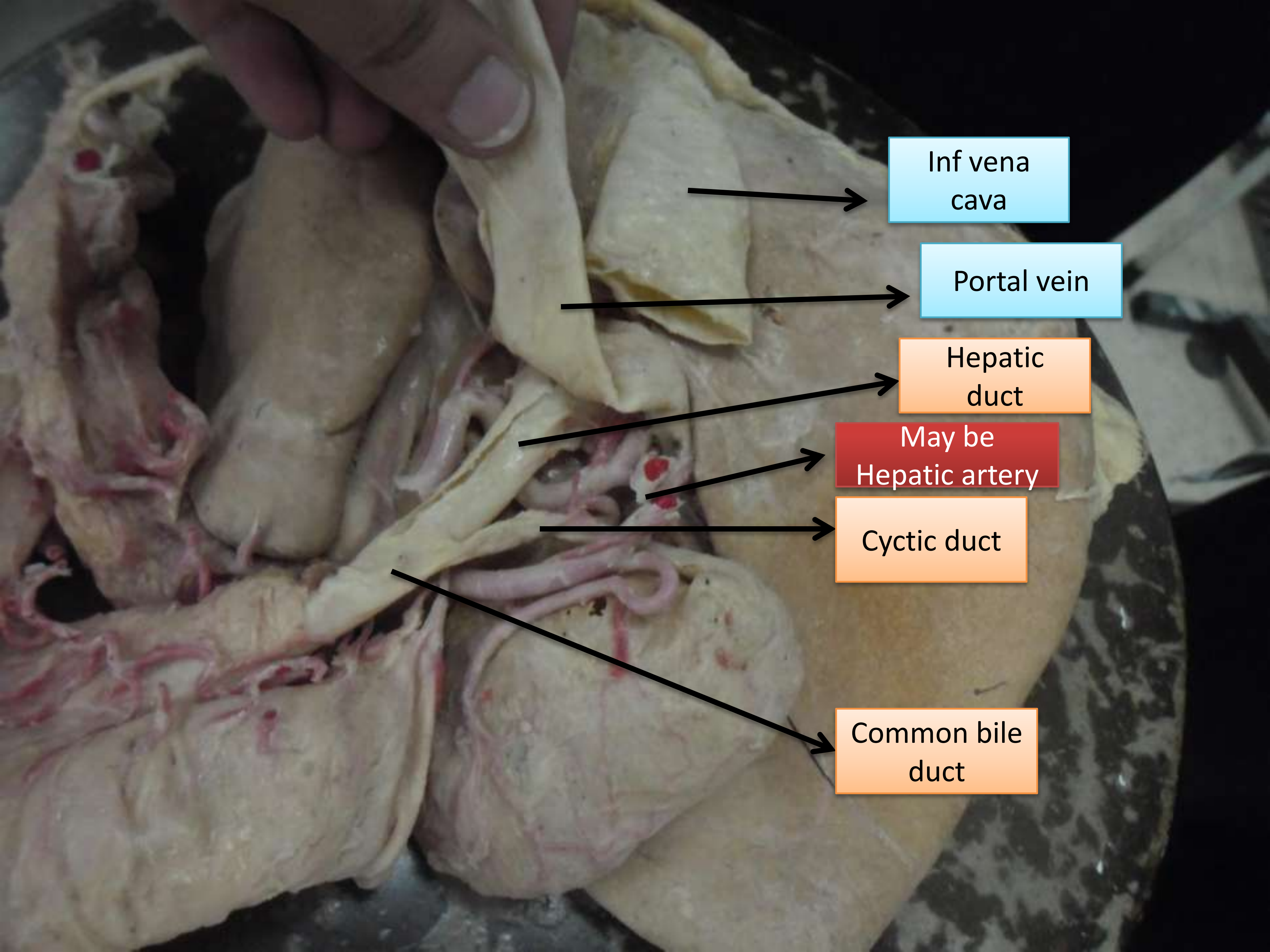
1

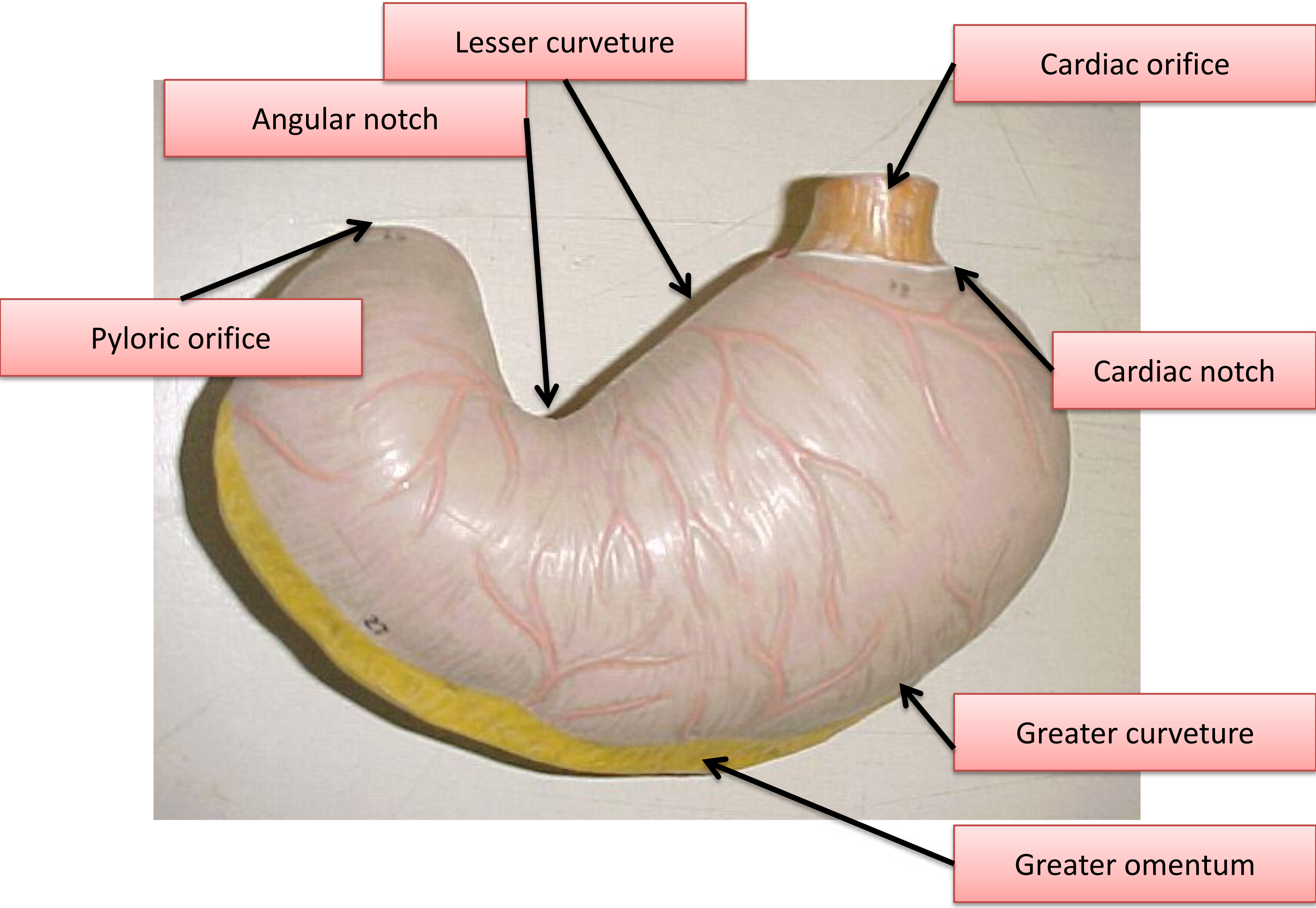
2

3

Gastric impression

Tuber omental of the liver related tothe ant surfa ce of lesser omentum while Tuber omental of the pancreas rlated to the post surface of the lesser omentum


Inf vena cava
Portal vein
Hepatic duct
May be Hepatic artery
Cyctic duct
Common bile duct



Lesser curveture

Cardiac orifice

Angular notch

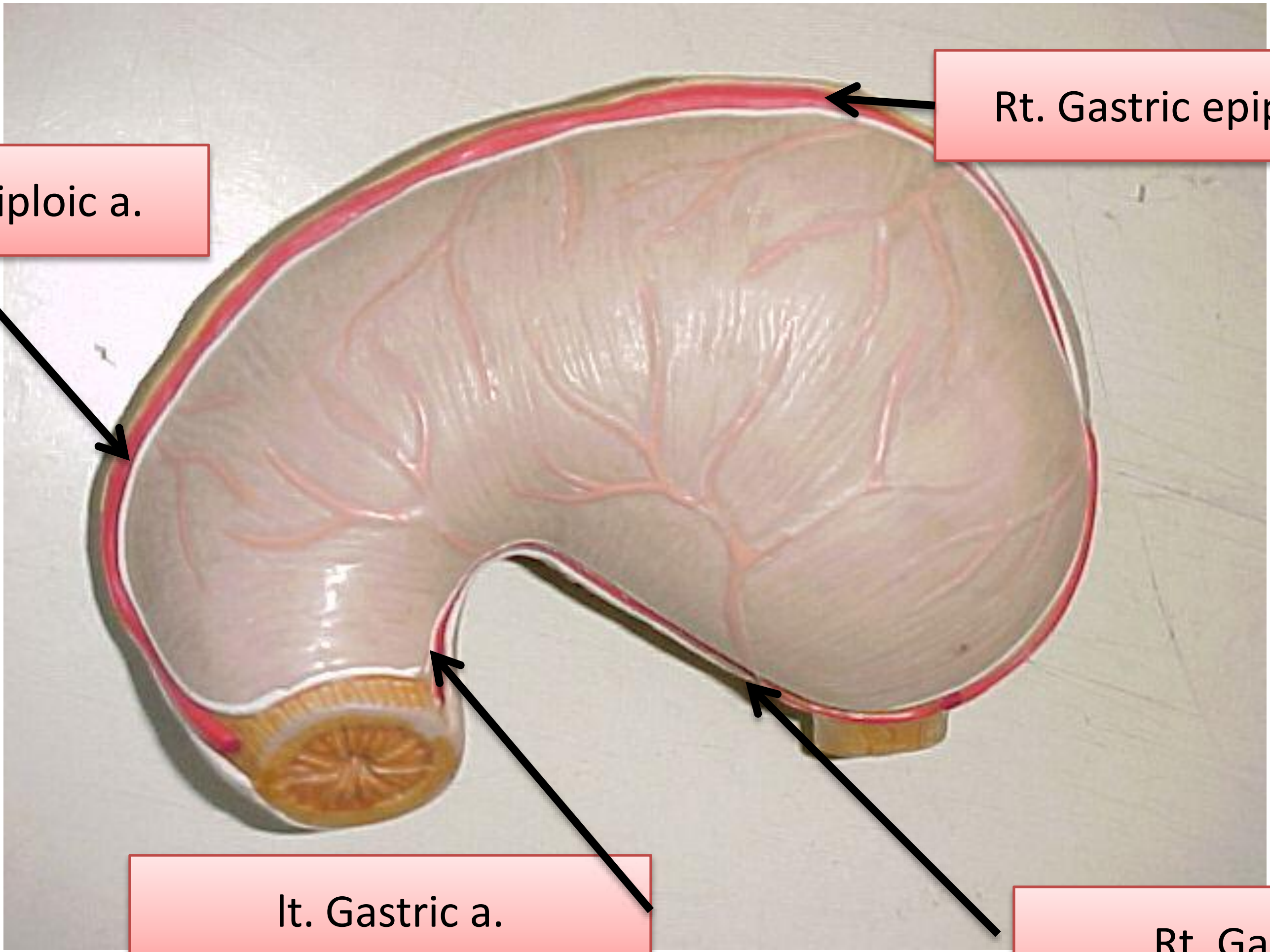
Pyloric orifice

Cardiac notch

Greater curveture

Greater omentum

[redacted]

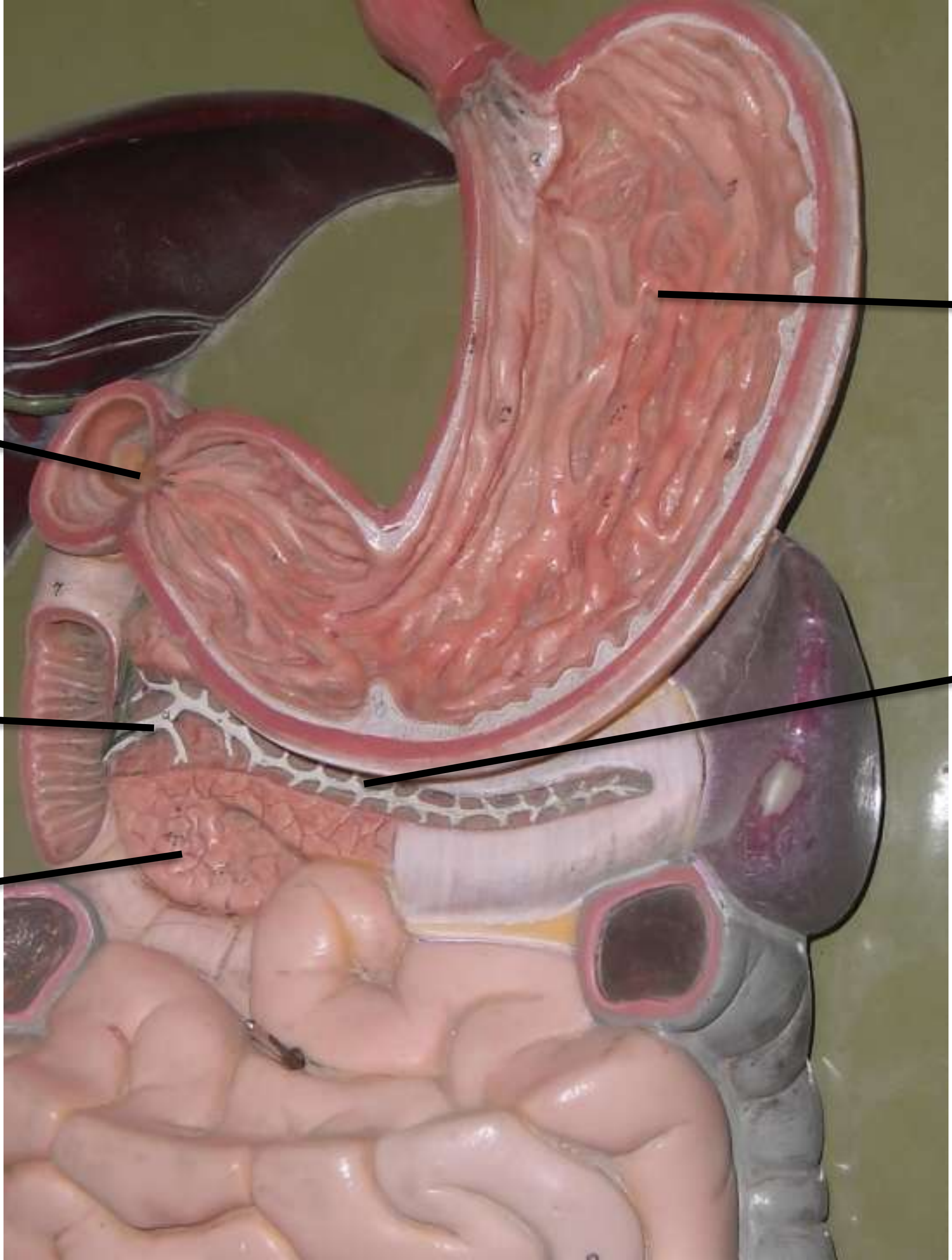


Rt. Gastric epiploic a.

lt. Gastric epiploic a.

lt. Gastric a.

Rt. Gastric a.

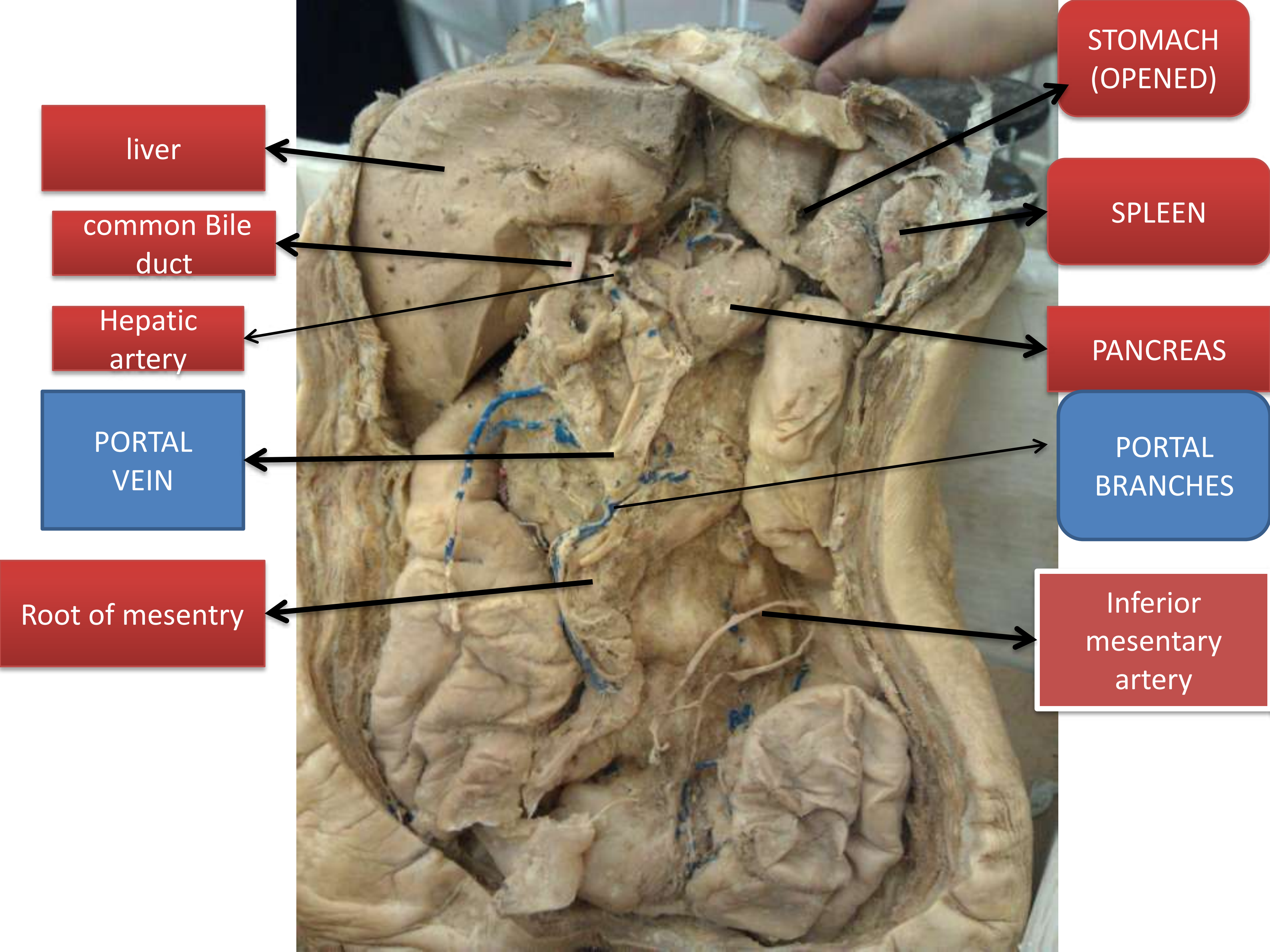


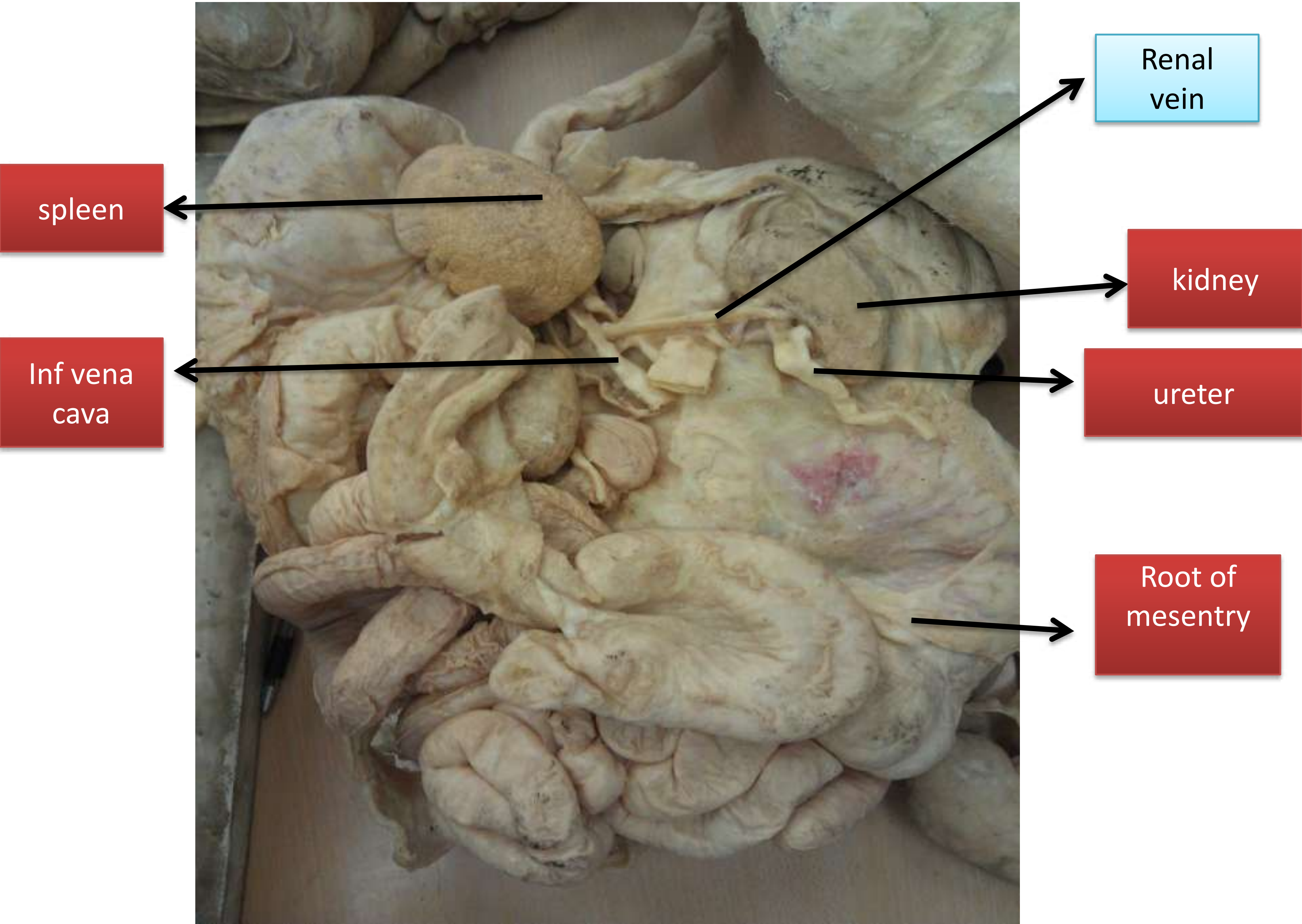
Rugi of stomach

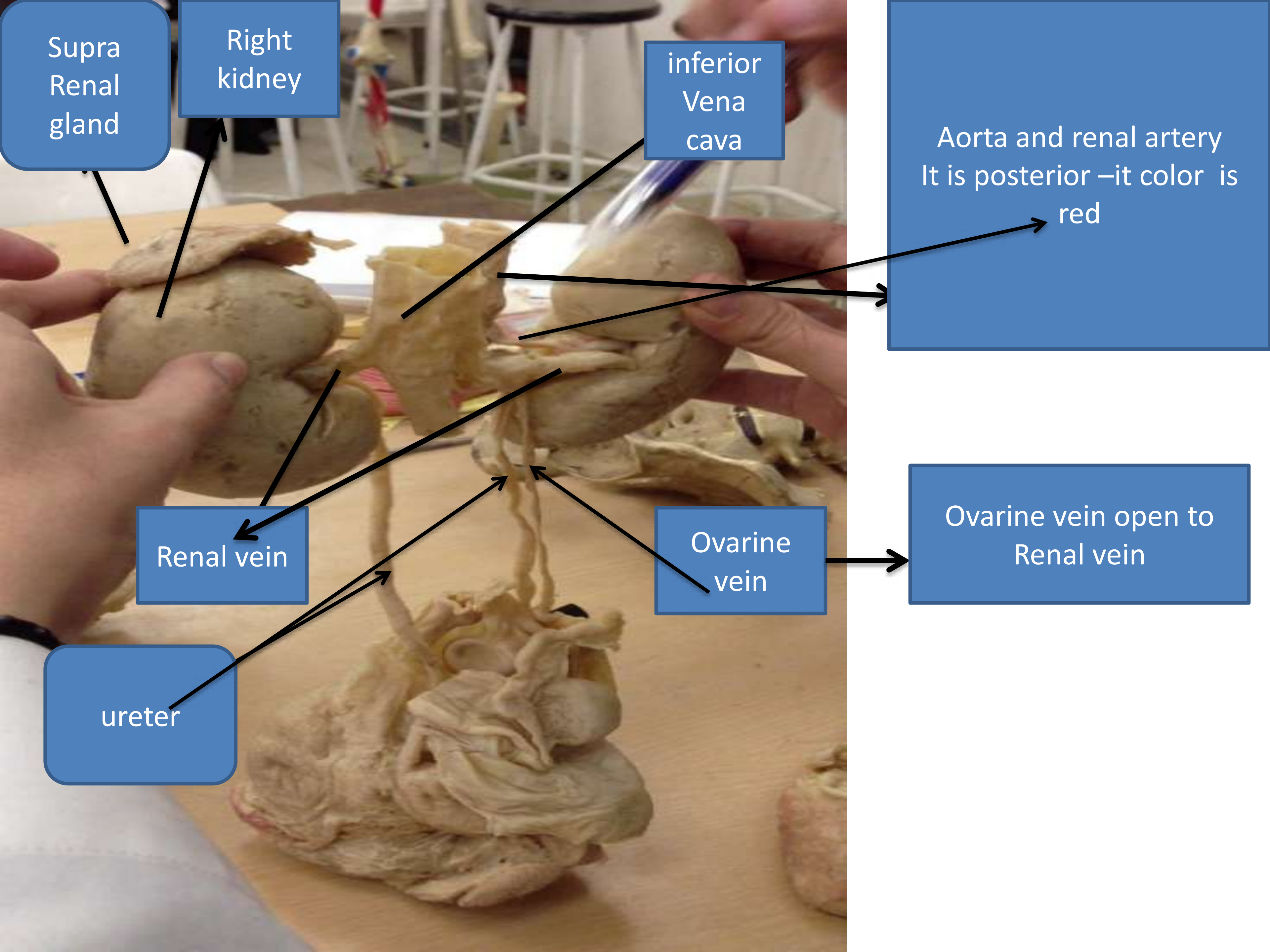
Pyluro duodenal Junction at the level of L1 (transpyloric plane)

Main pancreatic duct

Uncinate Process of pancreas


liver
common Bile duct
Hepatic artery
PORTAL VEIN
Root of mesentry
STOMACH (OPENED)
SPLEEN
PANCREAS
PORTAL BRANCHES
Inferior mesentary artery


Renal vein
spleen
kidney
Inf vena cava
ureter
Root of mesentry



Supra Renal gland

Right kidney

inferior Vena cava

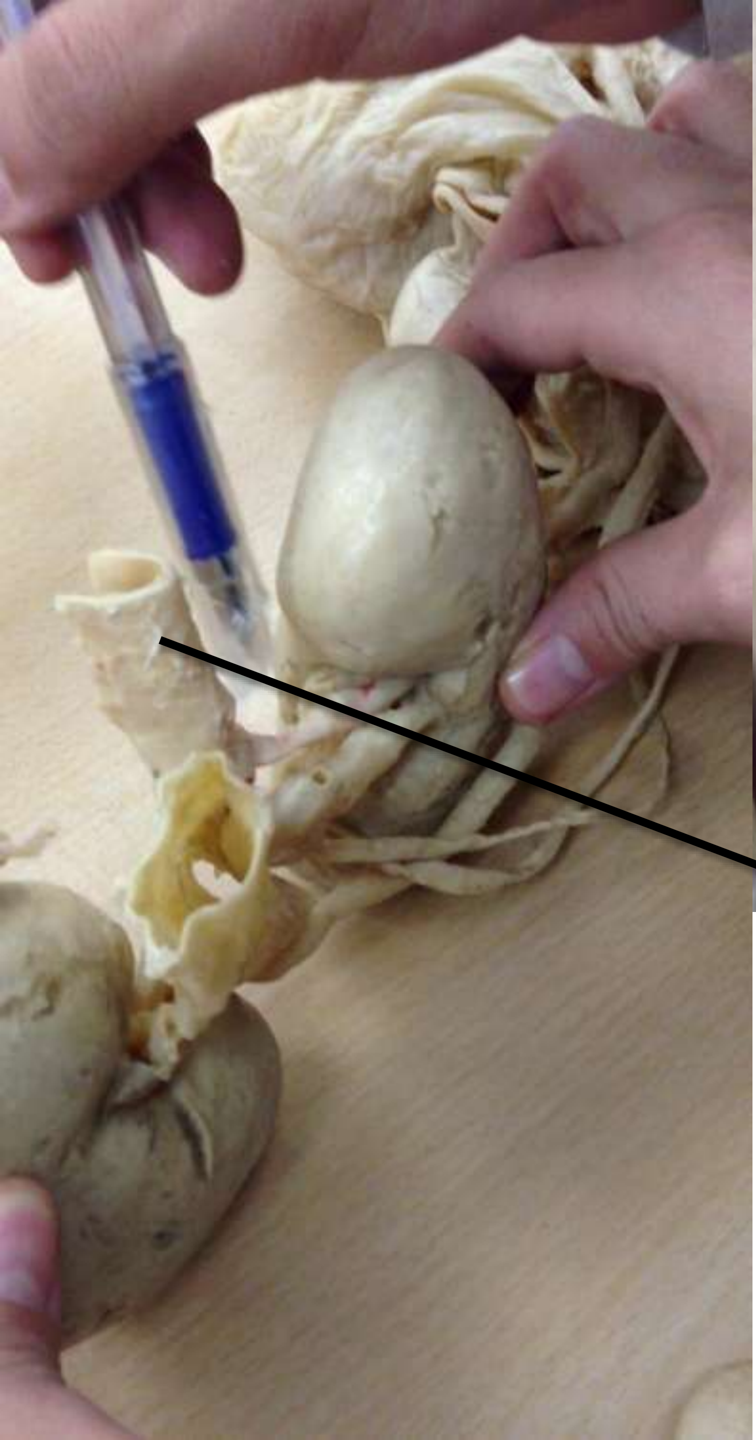
Aorta and renal artery
It is posterior –it color is red

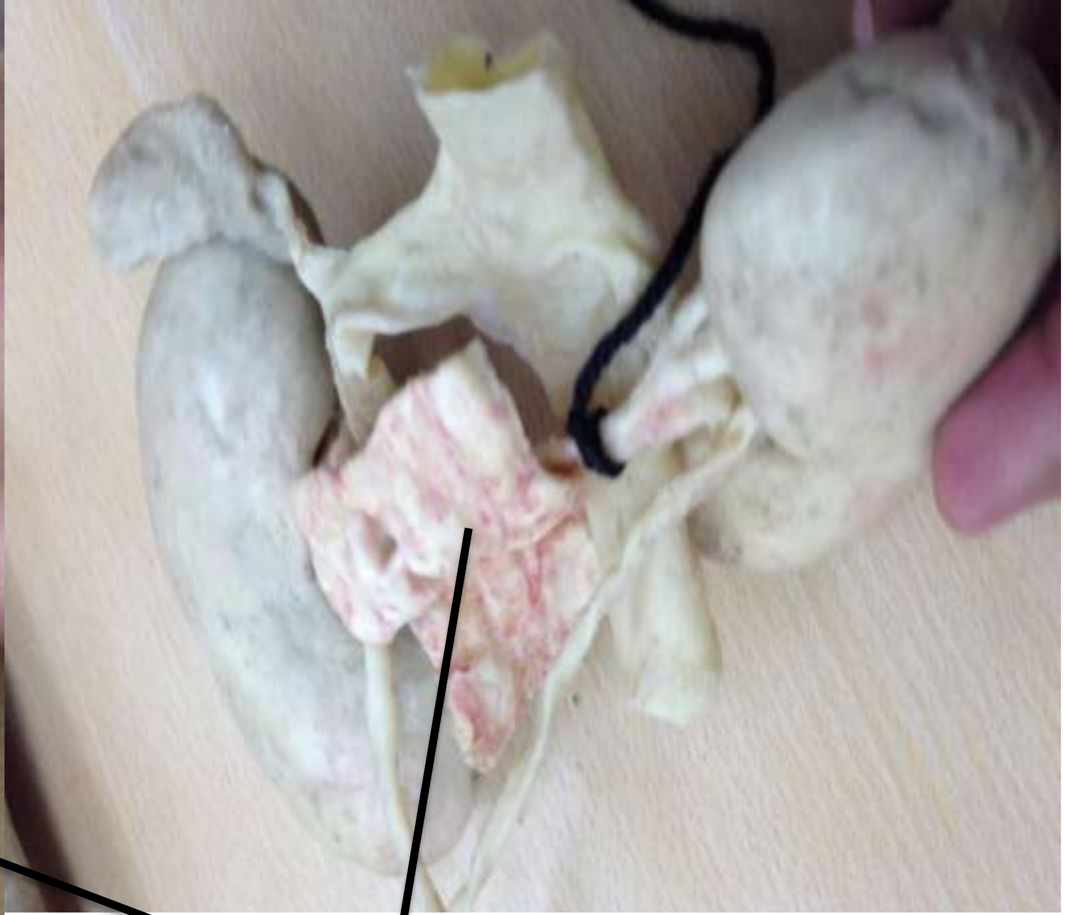
Renal vein

Ovarine vein

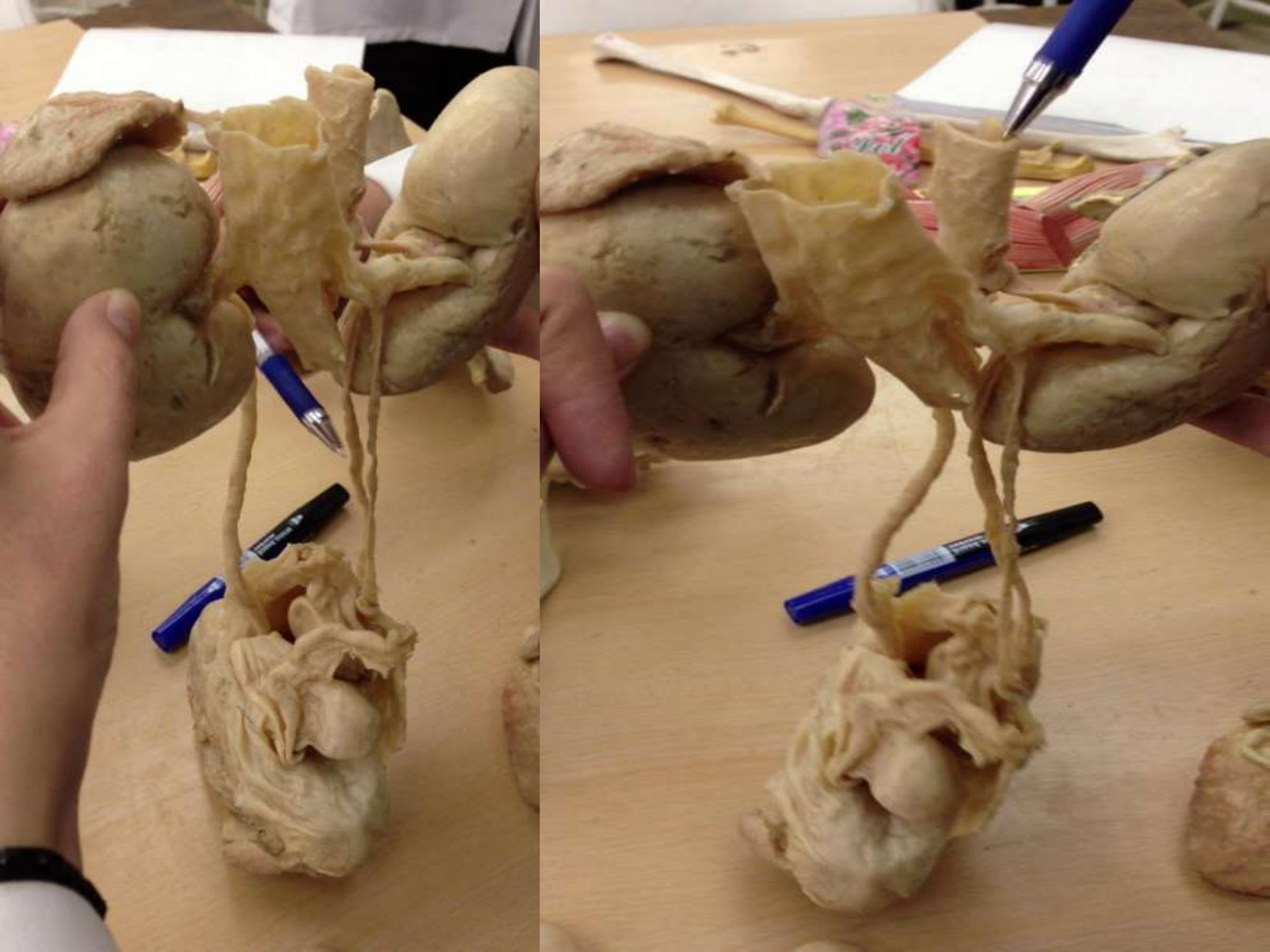
Ovarine vein open to Renal vein

ureter

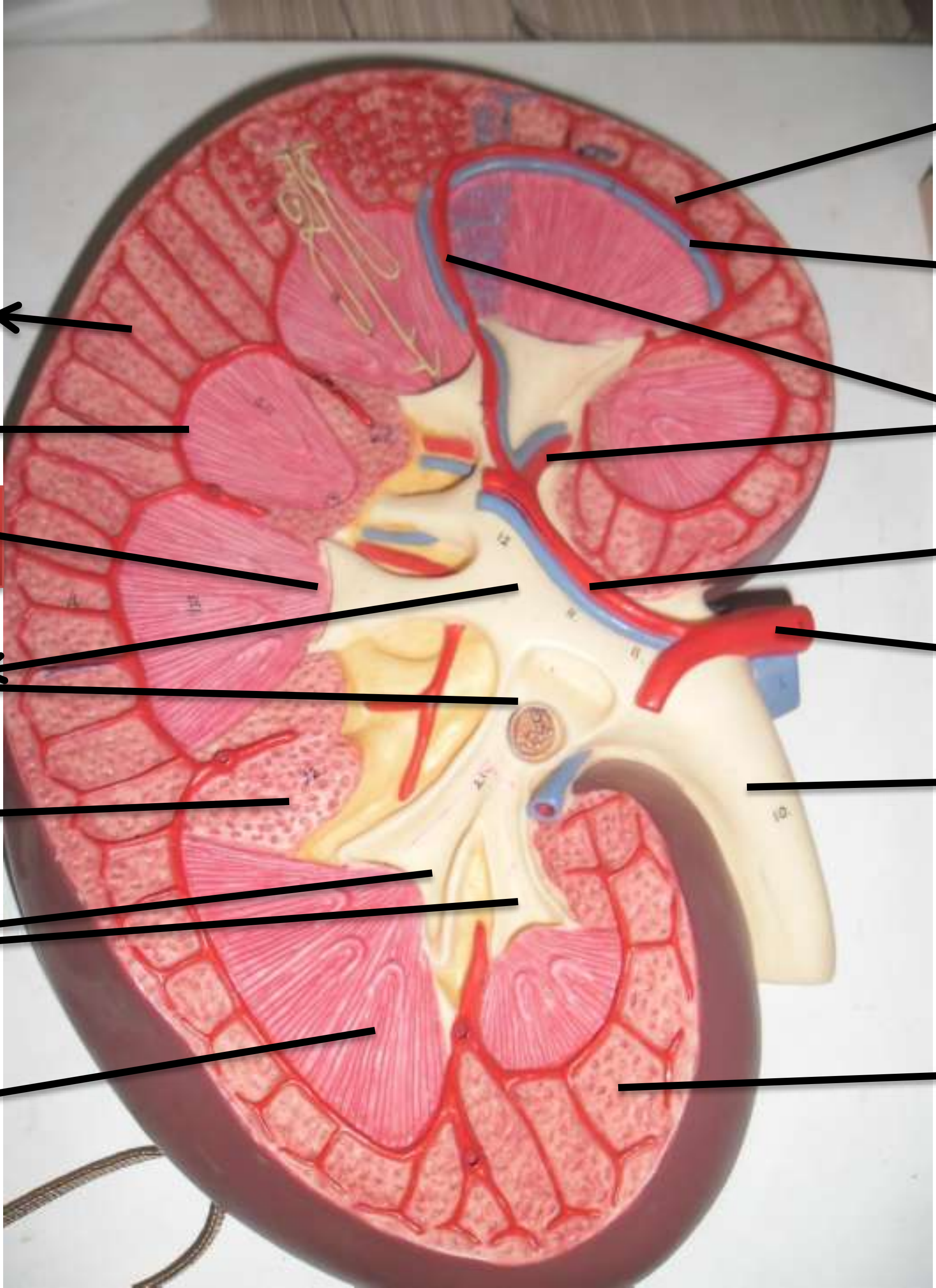




Aorta is posterior
But may be in exam rotate it and ask in
Posterior side but note that aorta is not
Large than inf vena cava



Kidney



Interlobular artery

Arcute artery

Pabila of pyramids

Major calyx

Renal column

Minor calyx

pyramid

Interlobular artery

Arcute artery

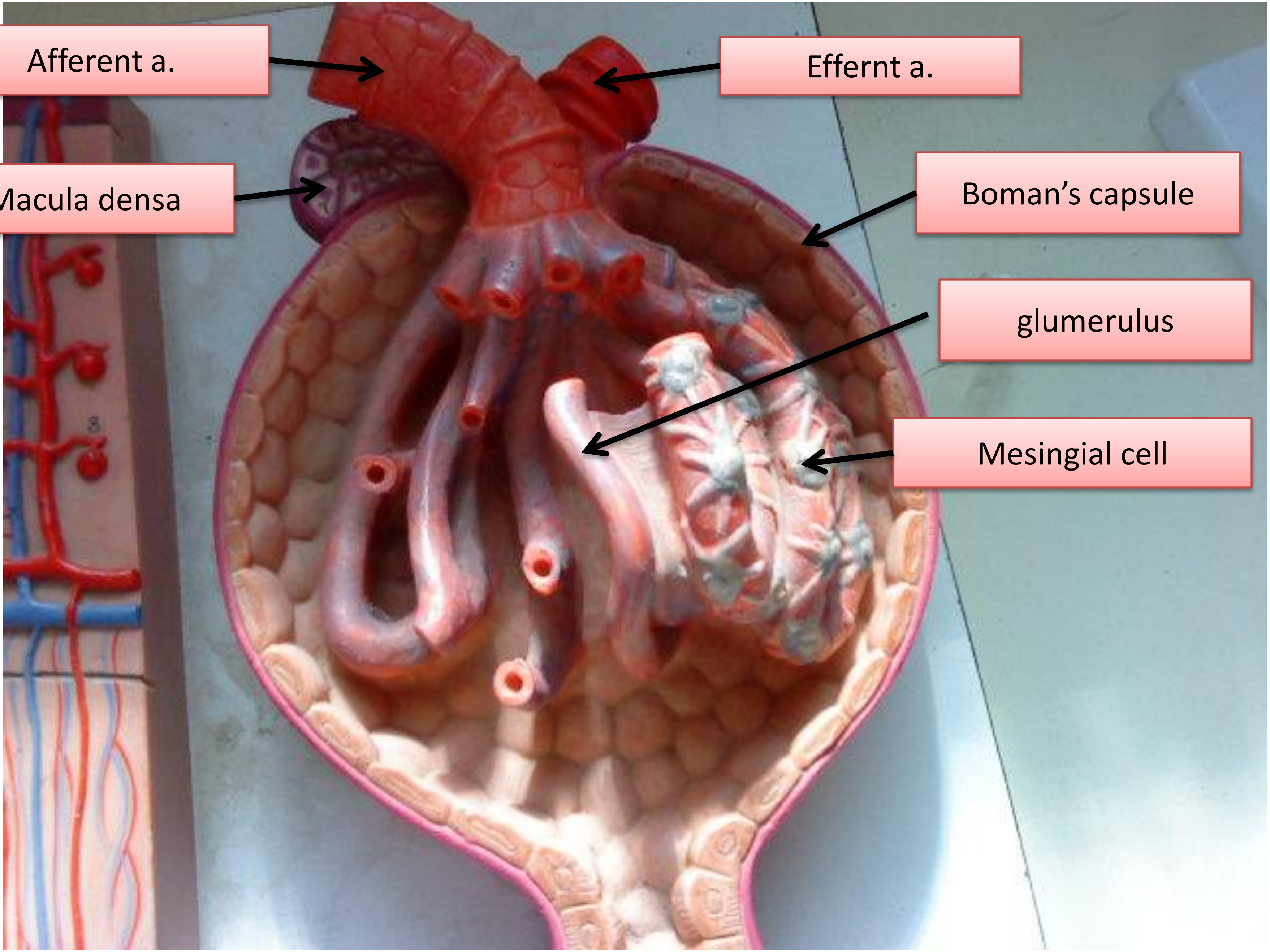
Interlobar arteries

Lobar artery

Renal artery

Renal pelvis

cortex



Afferent a.

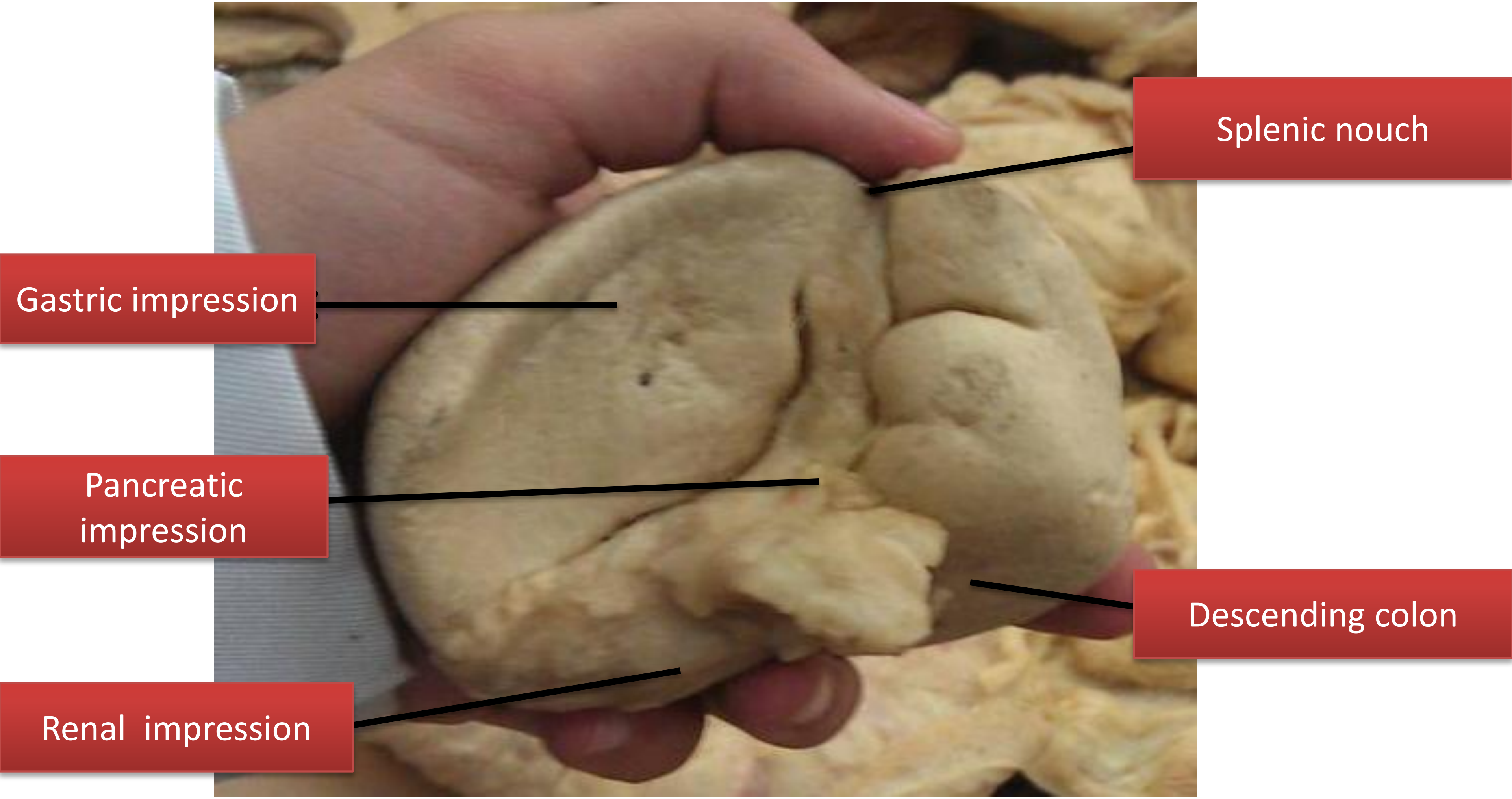
Effernt a.

Macula densa

Boman’s capsule

glumerulus

Mesingial cell


Splenic nouch
Gastric impression
Pancreatic impression
Descending colon
Renal impression

Upper limb

Bones of upper limb

BONES OF THE SHOULDER

Scapula:

Type : it is a flat bone

Development: by cartilagenous ossification

Identify right or left:

1)The glenoid cavity is directed laterally

2)The posterior surface is marked by spine

3)The upper border is the shotest border

CLAVICAL:

TYPE: non typical long bone

DEVELOPMENT : membranous OSSIFICATION

IDENTIFY RIGHT OR LEFT:

1)The rounded end (sternal end)medial

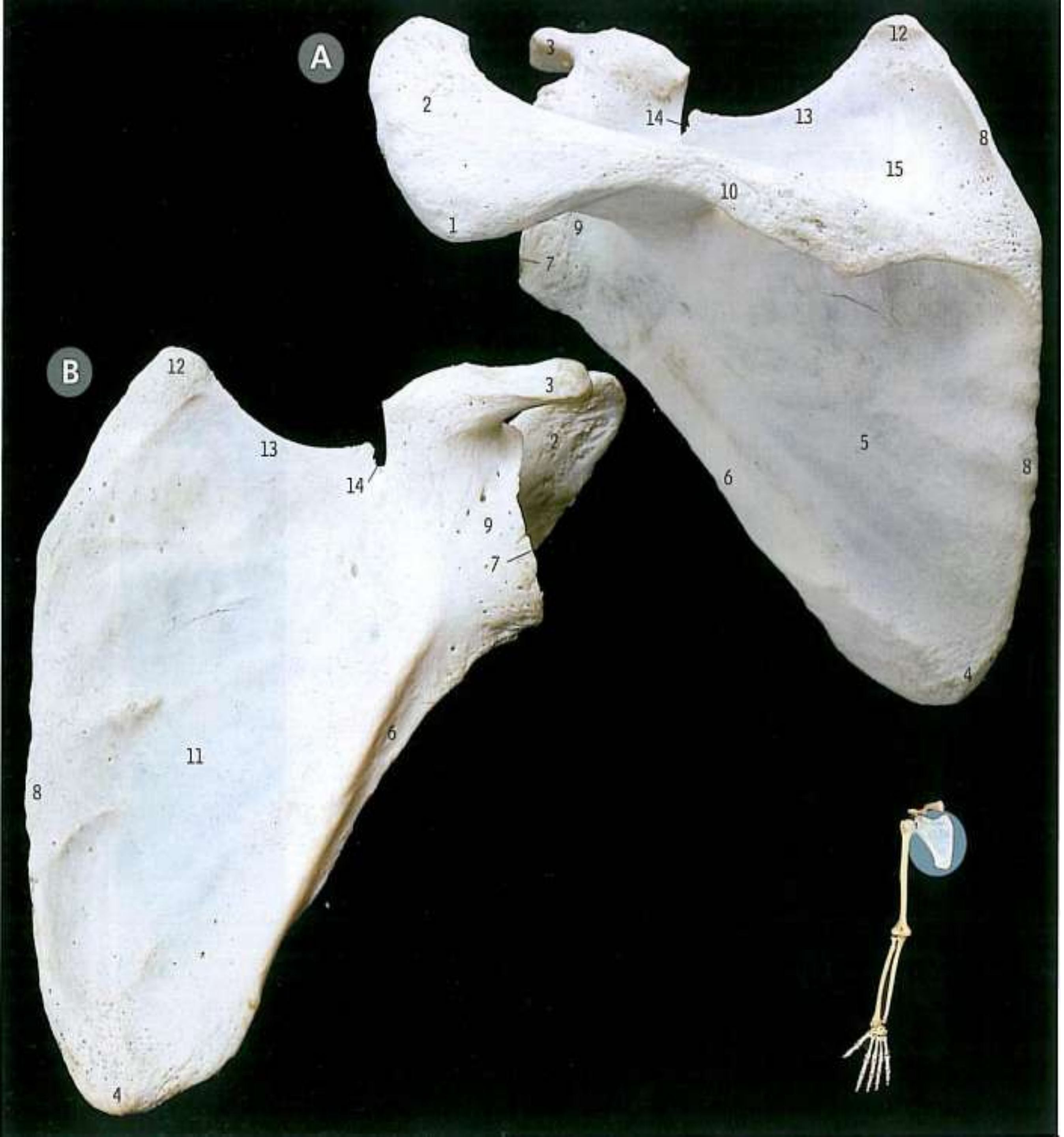
2)The flattened end (acromal end)lateral

3)the medial 2thirds of shaft convex forward

4)The lateral thrid is convex backward

5)The upper surface is almost smooth

6)The lower surface is rough and shows a shallow groove in it is intermediate third

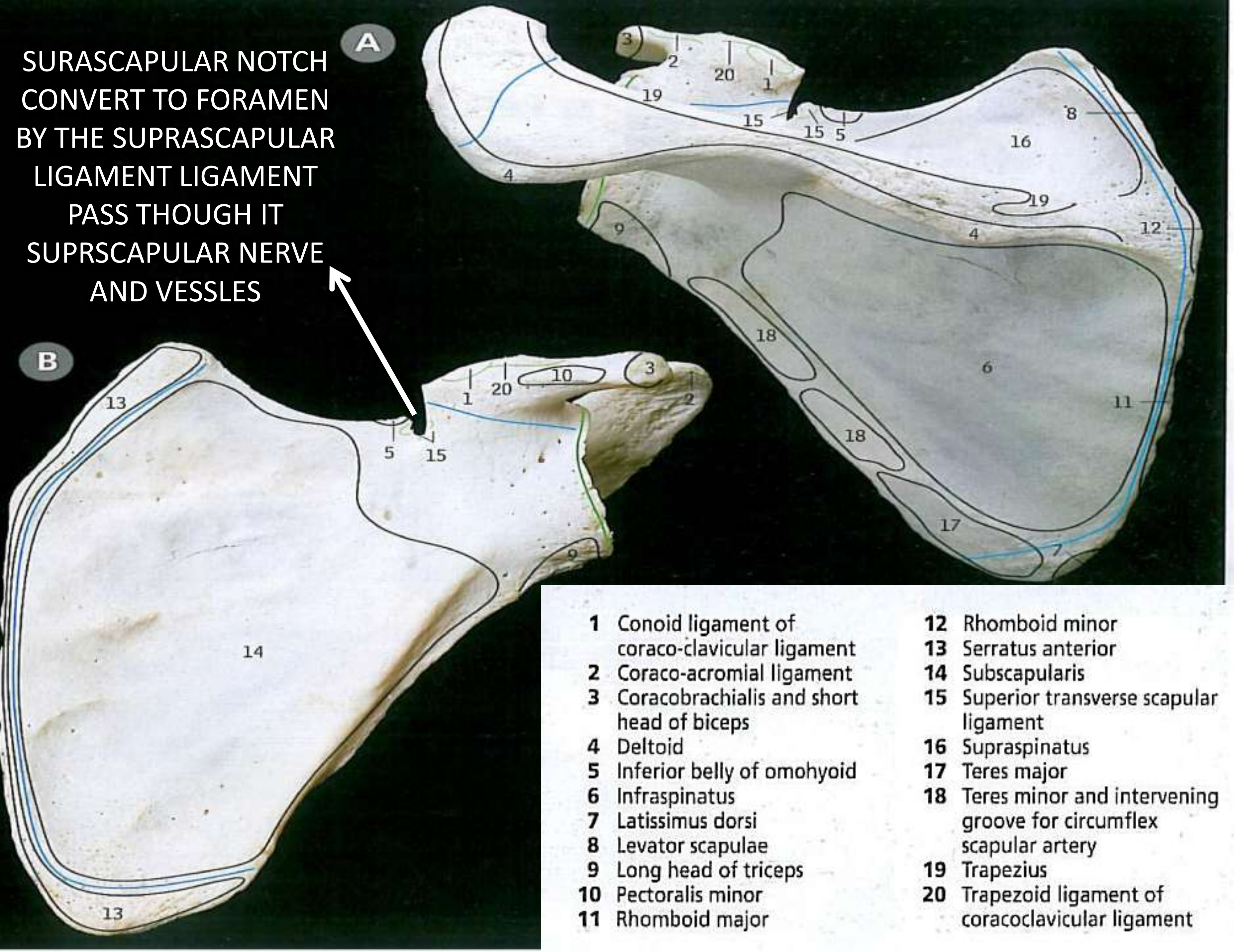

A
3
2
12
14
13
8
15
10
1
9
7
5
6
8
4
B
12
3
13
2
14
9
7
6
11
8
4

A dorsal surface

B costal surface

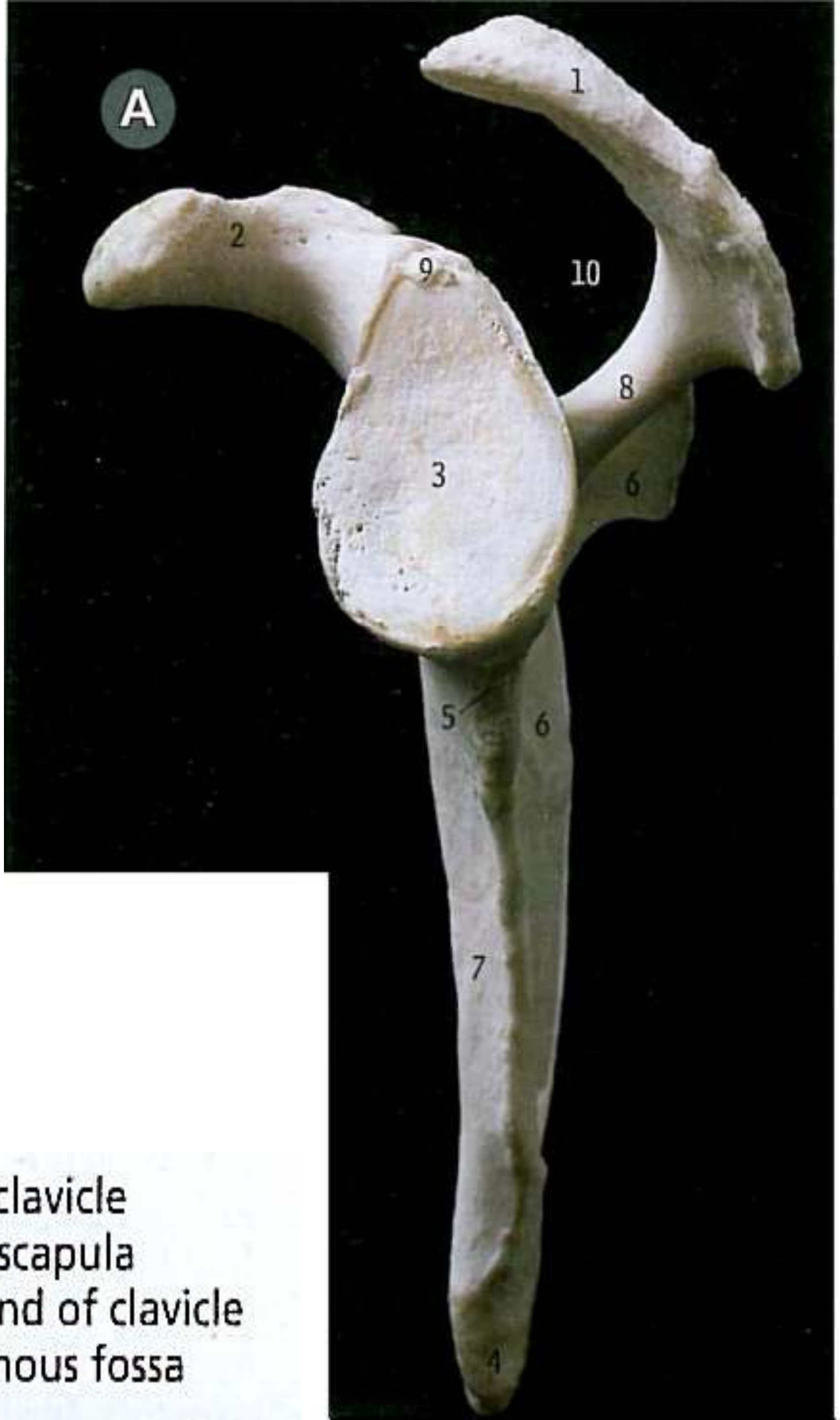
1 Acromial angle
2 Acromion
3 Coracoid process
4 Inferior angle
5 Infraspinous fossa
6 Lateral border
7 Margin of glenoid cavity
8 Medial border

9 Neck (and spinoglenoid notch on dorsal surface)
10 Spine
11 Subscapular fossa
12 Superior angle
13 Superior border
14 Suprascapular notch
15 Supraspinous fossa

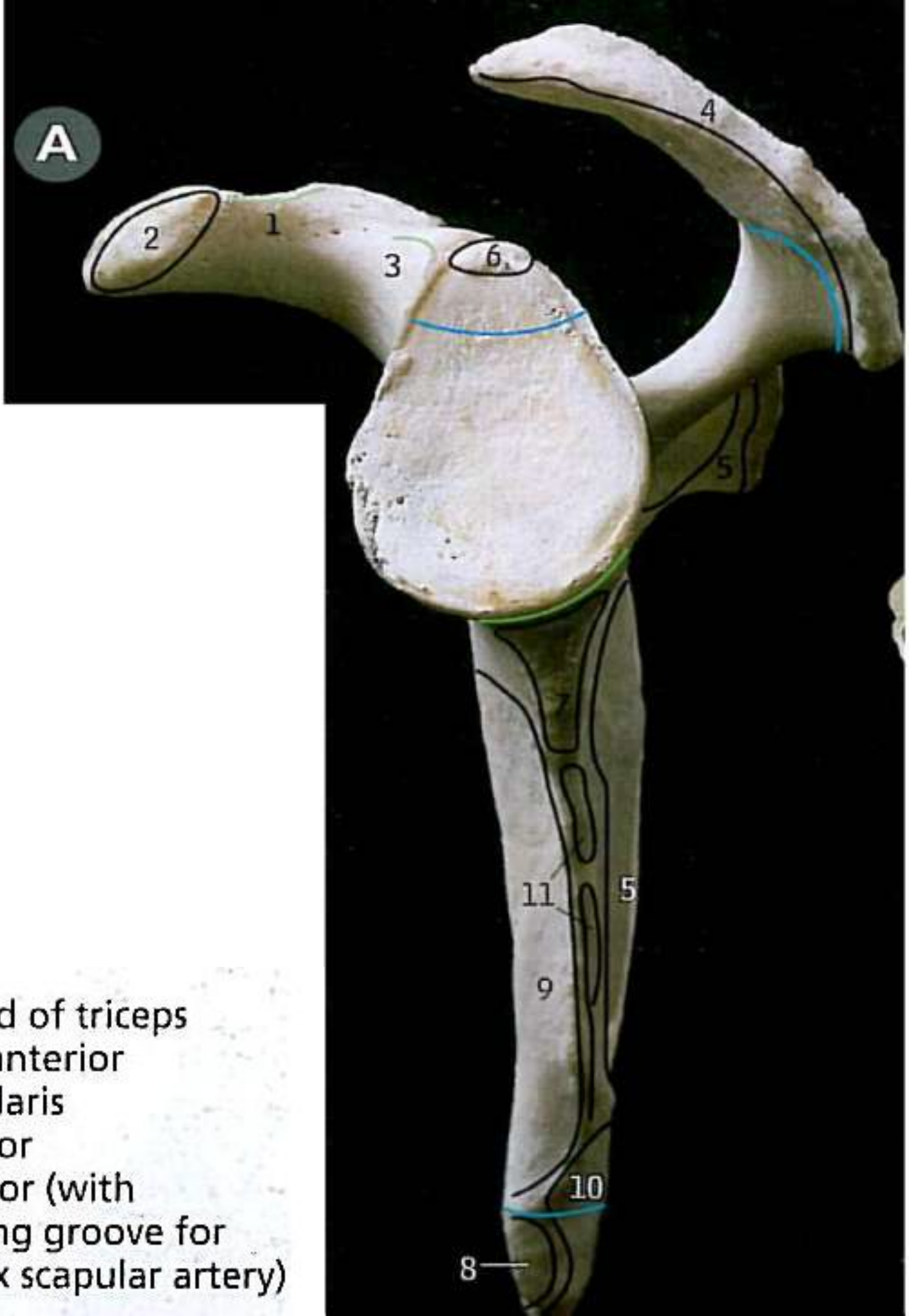


SURASCAPULAR NOTCH
CONVERT TO FORAMEN
BY THE SUPRASCAPULAR
LIGAMENT LIGAMENT
PASS THOUGH IT
SUPRSCAPULAR NERVE
AND VESSLES

1	Conoid ligament of coraco-clavicular ligament
2	Coraco-acromial ligament
3	Coracobrachialis and short head of biceps
4	Deltoid
5	Inferior belly of omohyoid
6	Infraspinatus
7	Latissimus dorsi
8	Levator scapulae
9	Long head of triceps
10	Pectoralis minor
11	Rhomboid major
12	Rhomboid minor
13	Serratus anterior
14	Subscapularis
15	Superior transverse scapular ligament
16	Supraspinatus
17	Teres major
18	Teres minor and intervening groove for circumflex scapular artery
19	Trapezius
20	Trapezoid ligament of coracoclavicular ligament

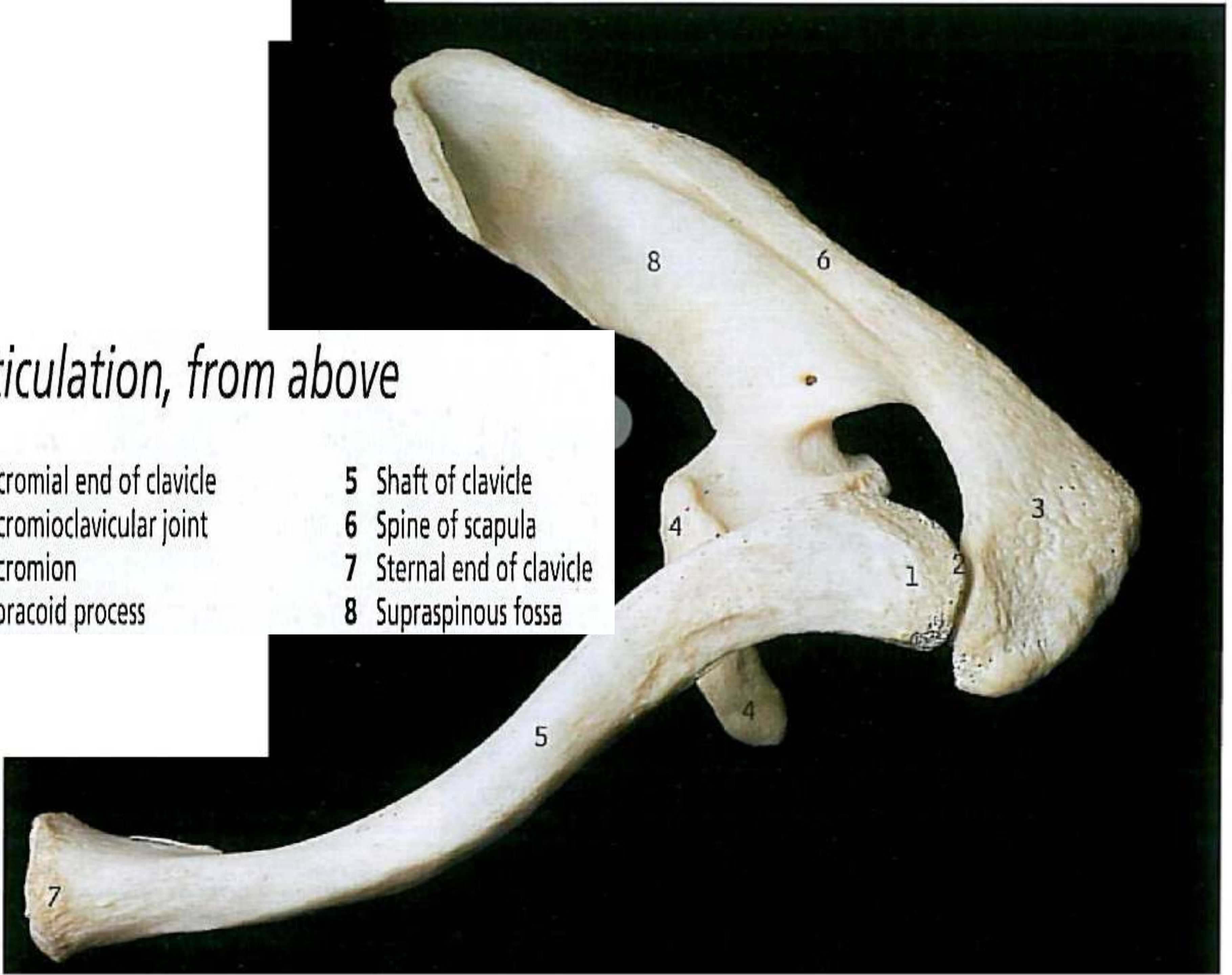


1 Acromial end of clavicle
2 Acromioclavicular joint
3 Acromion
4 Coracoid process
5 Shaft of clavicle
6 Spine of scapula
7 Sternal end of clavicle
8 Supraspinous fossa

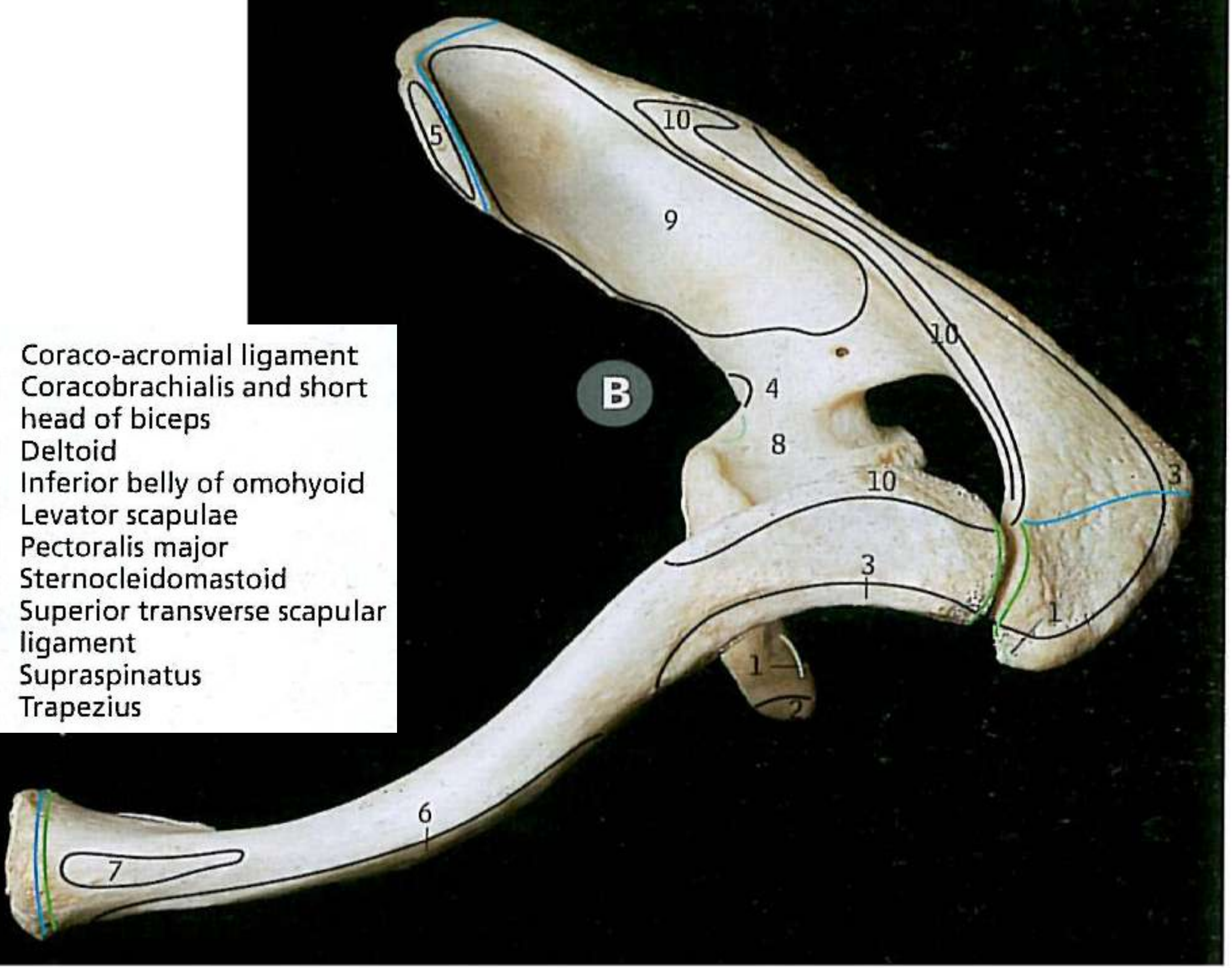


1 Coraco-acromial ligament
2 Coracobrachialis and short head of biceps
3 Coracohumeral ligament
4 Deltoid
5 Infraspinatus
6 Long head of biceps
7 Long head of triceps
8 Serratus anterior
9 Subscapularis
10 Teres major
11 Teres minor (with intervening groove for circumflex scapular artery)

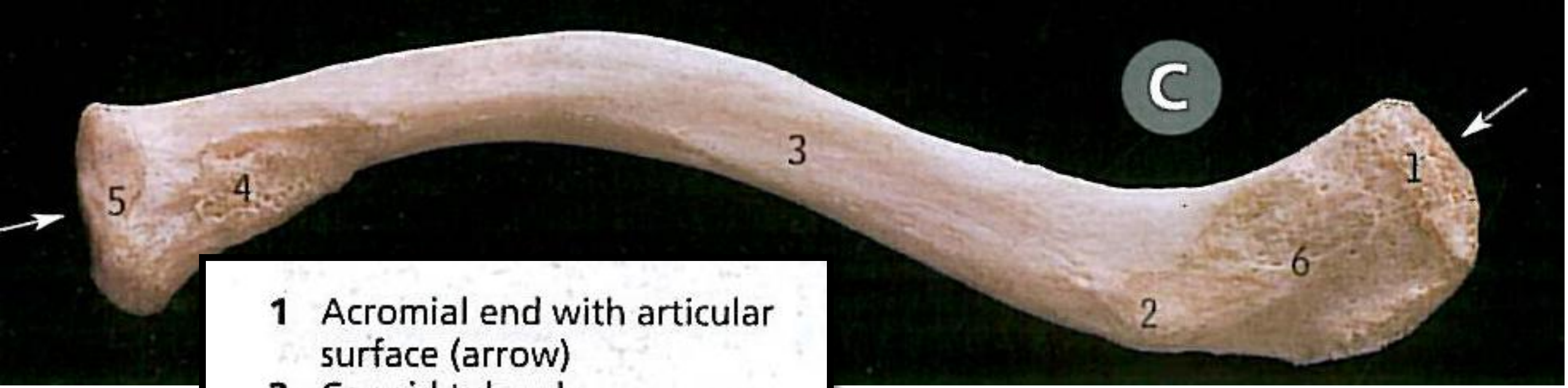
articulation, from above



1 Acromial end of clavicle
2 Acromioclavicular joint
3 Acromion
4 Coracoid process
5 Shaft of clavicle
6 Spine of scapula
7 Sternal end of clavicle
8 Supraspinous fossa

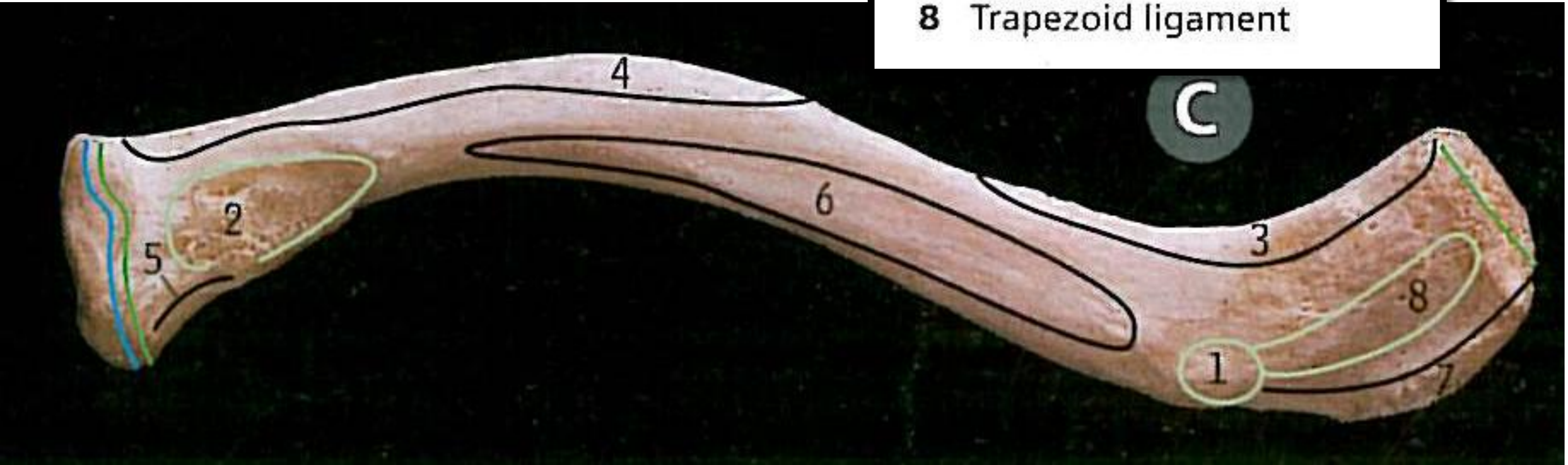


1 Coraco-acromial ligament
2 Coracobrachialis and short head of biceps
3 Deltoid
4 Inferior belly of omohyoid
5 Levator scapulae
6 Pectoralis major
7 Sternocleidomastoid
8 Superior transverse scapular ligament
9 Supraspinatus
10 Trapezius



1 Acromial end with articular surface (arrow)
2 Conoid tubercle
3 Groove for subclavius muscle
4 Impression for costoclavicular ligament
5 Sternal end with articular surface (arrow)
6 Trapezoid line

Clavial
From below



1 Conoid ligament
2 Costoclavicular ligament
3 Deltoid
4 Pectoralis major
5 Sternohyoid
6 Subclavius and clavipectoral fascia
7 Trapezius
8 Trapezoid ligament

attachment

BONE OF ARM (HUMERUS)

TYPE:typical long bone

DEVELOPMENT:by cartilagenous ossification

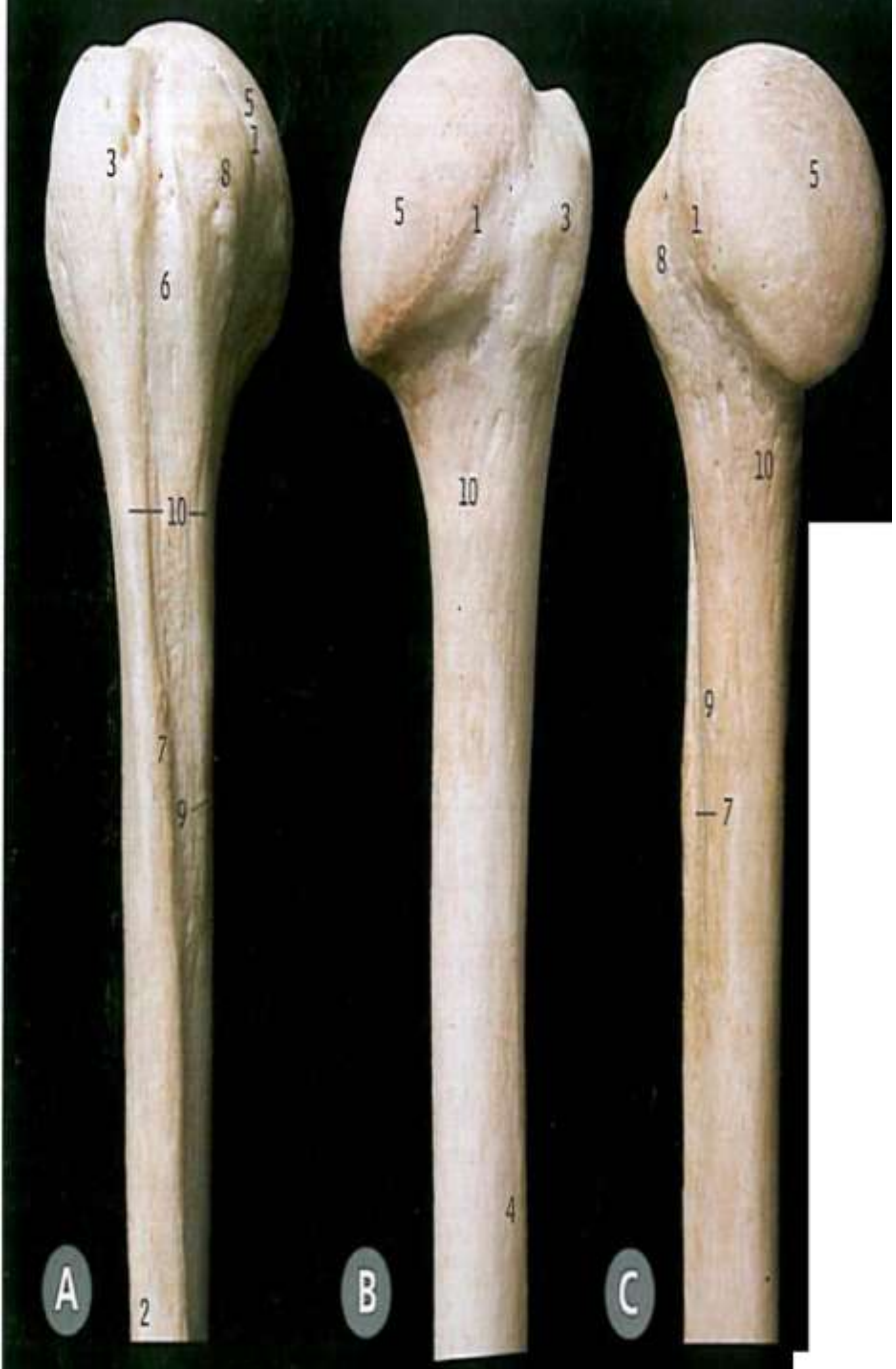
IDENTIFY RIGHT OR LEFT:

1)The upper end is hemispherical head

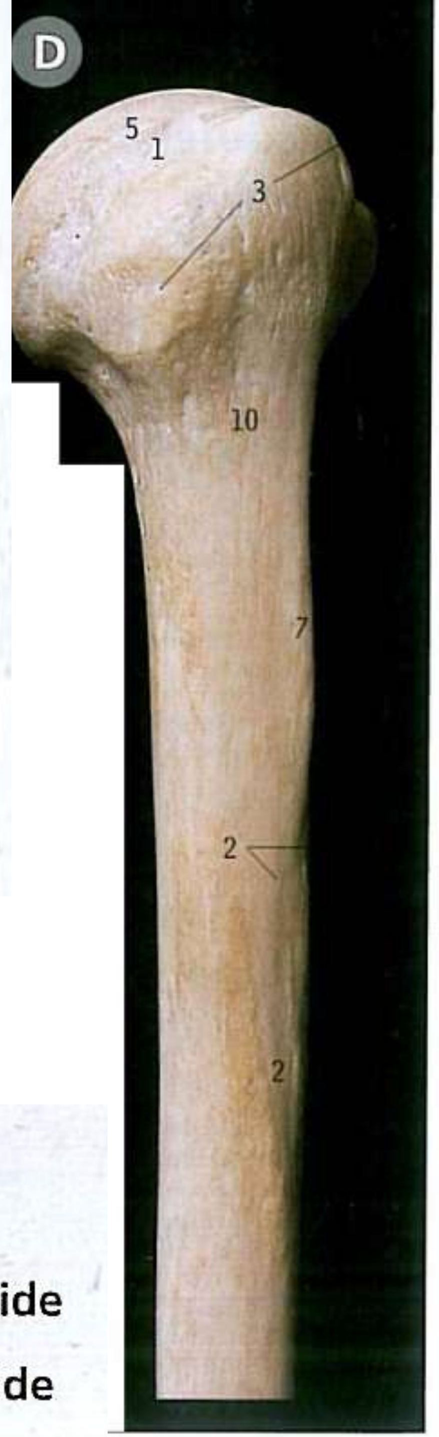
2)The lower end identified by trochlea and capitulum (remmbar two eyes are infront)

3)The medial side is identified by head directed medially)

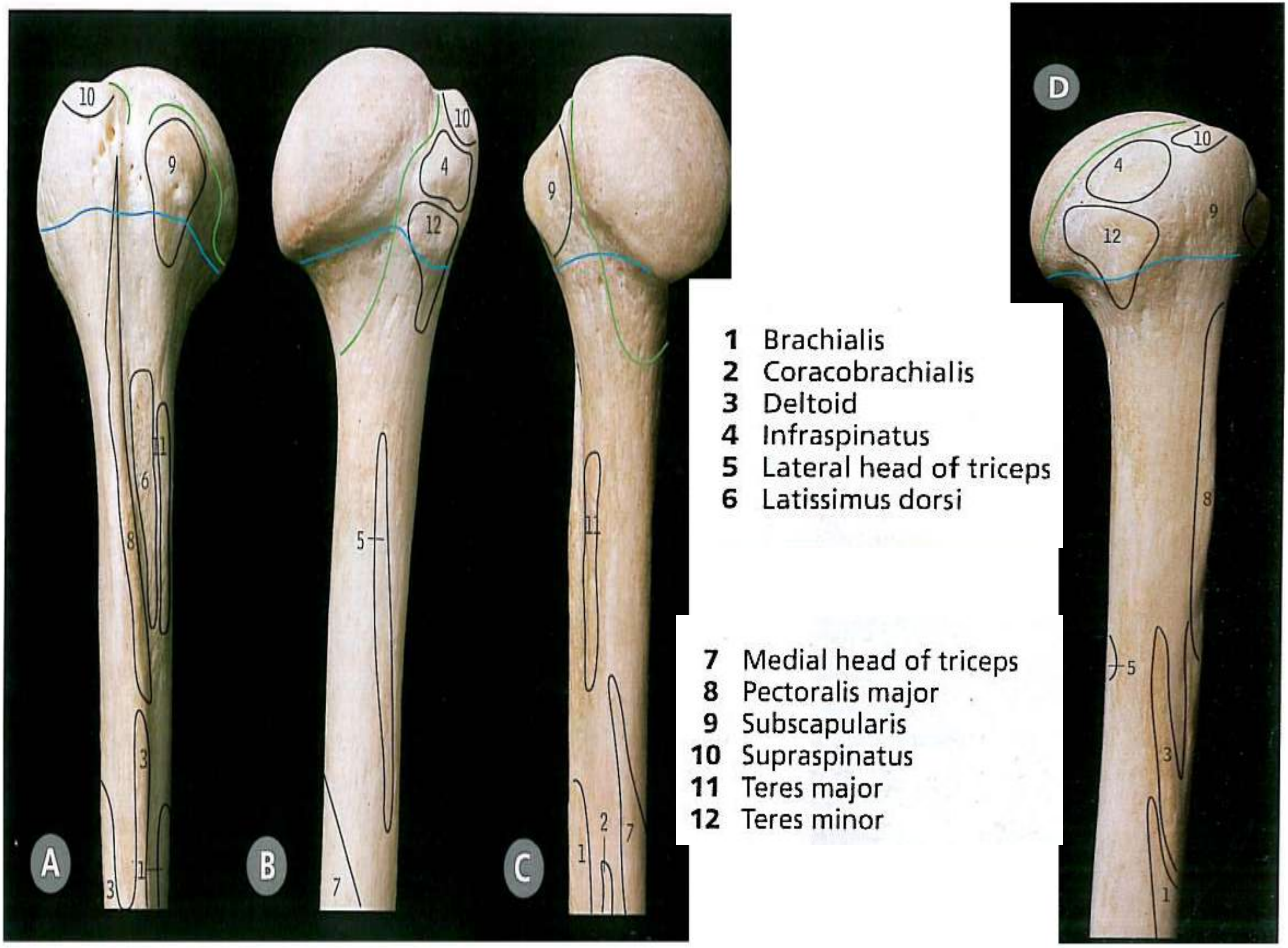
4)The posterior surface is identified by deep olecranon fossa in lower end


3
5
1
8
6
10
7
9
2
A
5
1
3
10
4
B
8
1
5
10
9
7
C

1 Anatomical neck
2 Deltoid tuberosity
3 Greater tubercle
4 Groove for radial nerve
5 Head
6 Intertubercular groove
7 Lateral lip of intertubular groove
8 Lesser tubercle
9 Medial lip of intertubercular groove
10 Surgical neck



Ⓐ from the front
Ⓑ from behind
Ⓒ from the medial side
Ⓓ from the lateral side

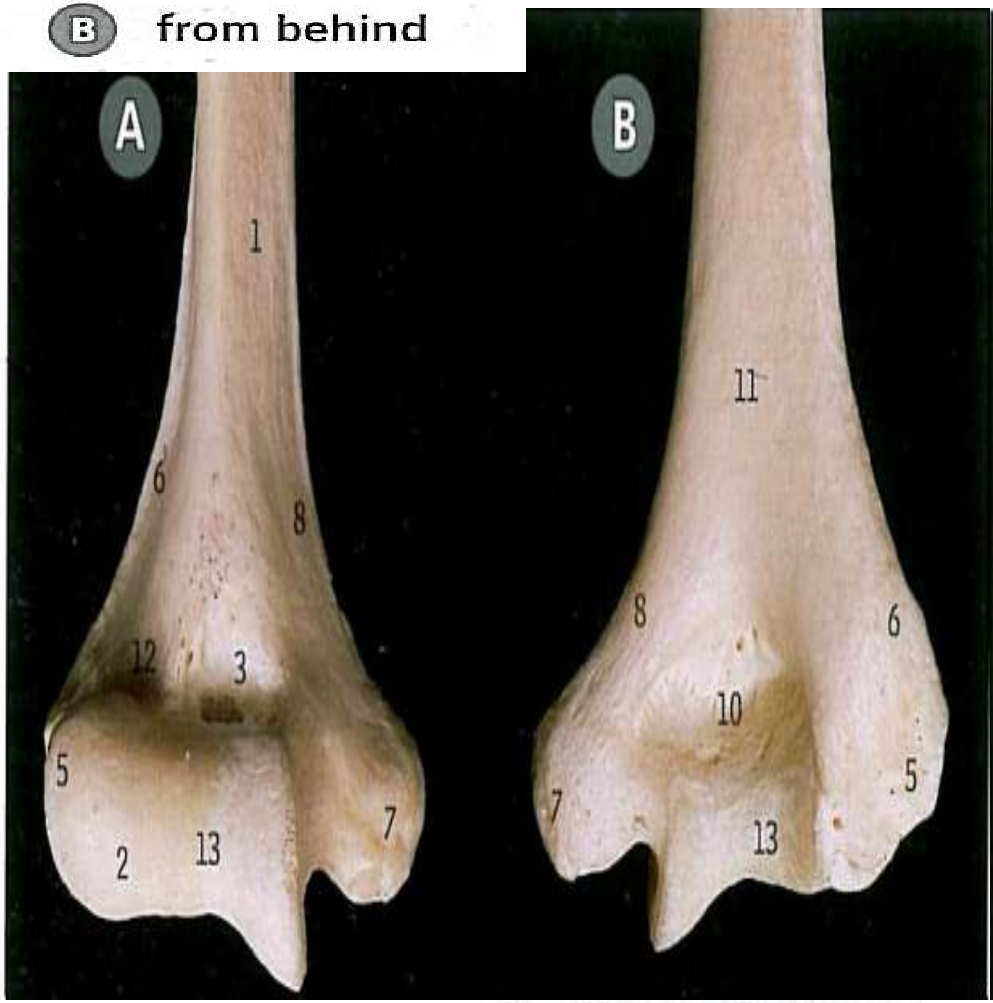

A
B
C
D
10
9
11
6
8
3
3
1
10
4
12
5
7
9
11
1
2
7
10
4
9
12
8
5
3
1

1 Brachialis
2 Coracobrachialis
3 Deltoid
4 Infraspinatus
5 Lateral head of triceps
6 Latissimus dorsi

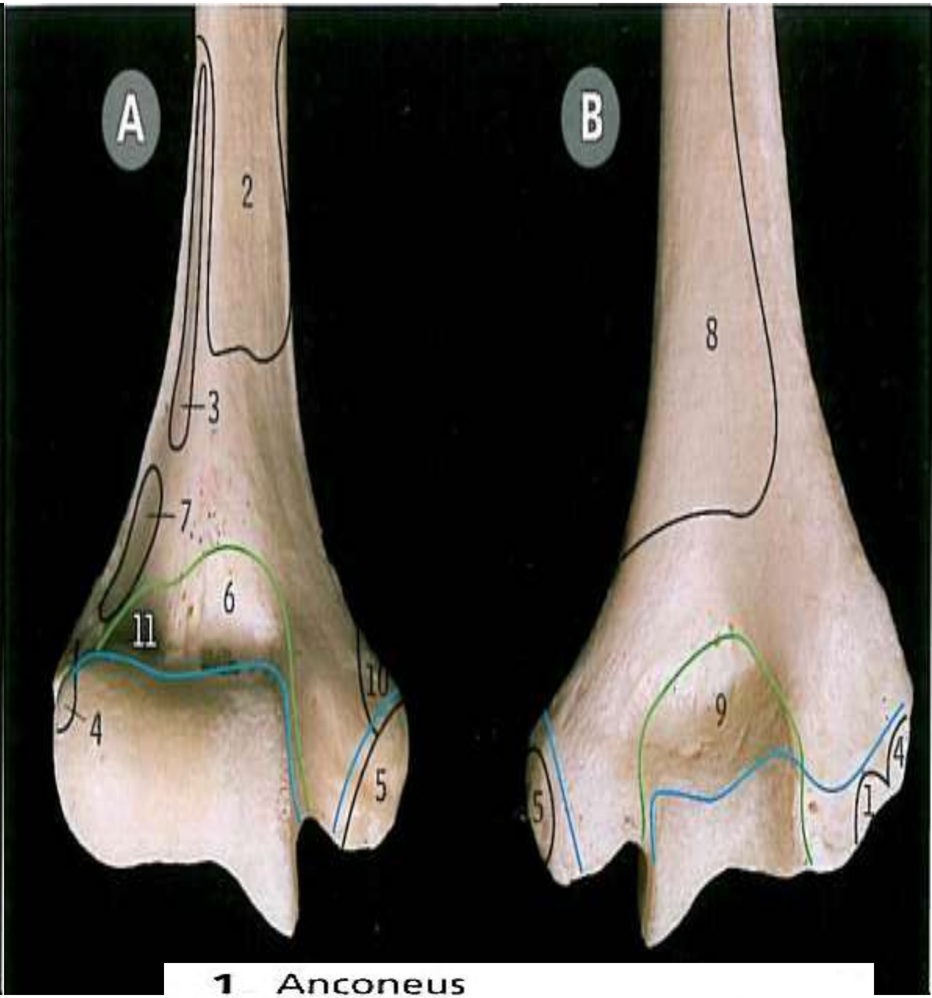
7 Medial head of triceps
8 Pectoralis major
9 Subscapularis
10 Supraspinatus
11 Teres major
12 Teres minor

Ⓐ from the front

Ⓑ from behind



1	Anterior surface
2	Capitulum
3	Coronoid fossa
5	Lateral epicondyle
6	Lateral supracondylar ridge
7	Medial epicondyle
8	Medial supracondylar ridge
10	Olecranon fossa
11	Posterior surface
12	Radial fossa
13	Trochlea



1	Anconeus
2	Brachialis
3	Brachioradialis
4	Common extensor origin
5	Common flexor origin
6	Coronoid fossa
7	Extensor carpi radialis longus
8	Medial head of triceps
9	Olecranon fossa
10	Pronator teres, humeral head
11	Radial fossa

Bones of forarm radius &ulna

Radius :

Type: typical long bone

DEVELOPMENT:by cartilagenous ossification

SITE:it is lateral bone of forarm

IDENTIFY RIGHT OR LEFT:

1)The apper end carries adick shaped head (with radial tuberosity medially)

2)The lower end is expanded and carries a styloid process

3)The shaft is convex laterally and has a sharp interosseous border medially

4)The ant surface of the lower end is smooth and concave

Ulna:

type: typical long bone

DEVELOPMENT:by cartilagenous ossification

SITE:it is medial bone of the forearm

IDENTIFY RIGHT OR LEFT:

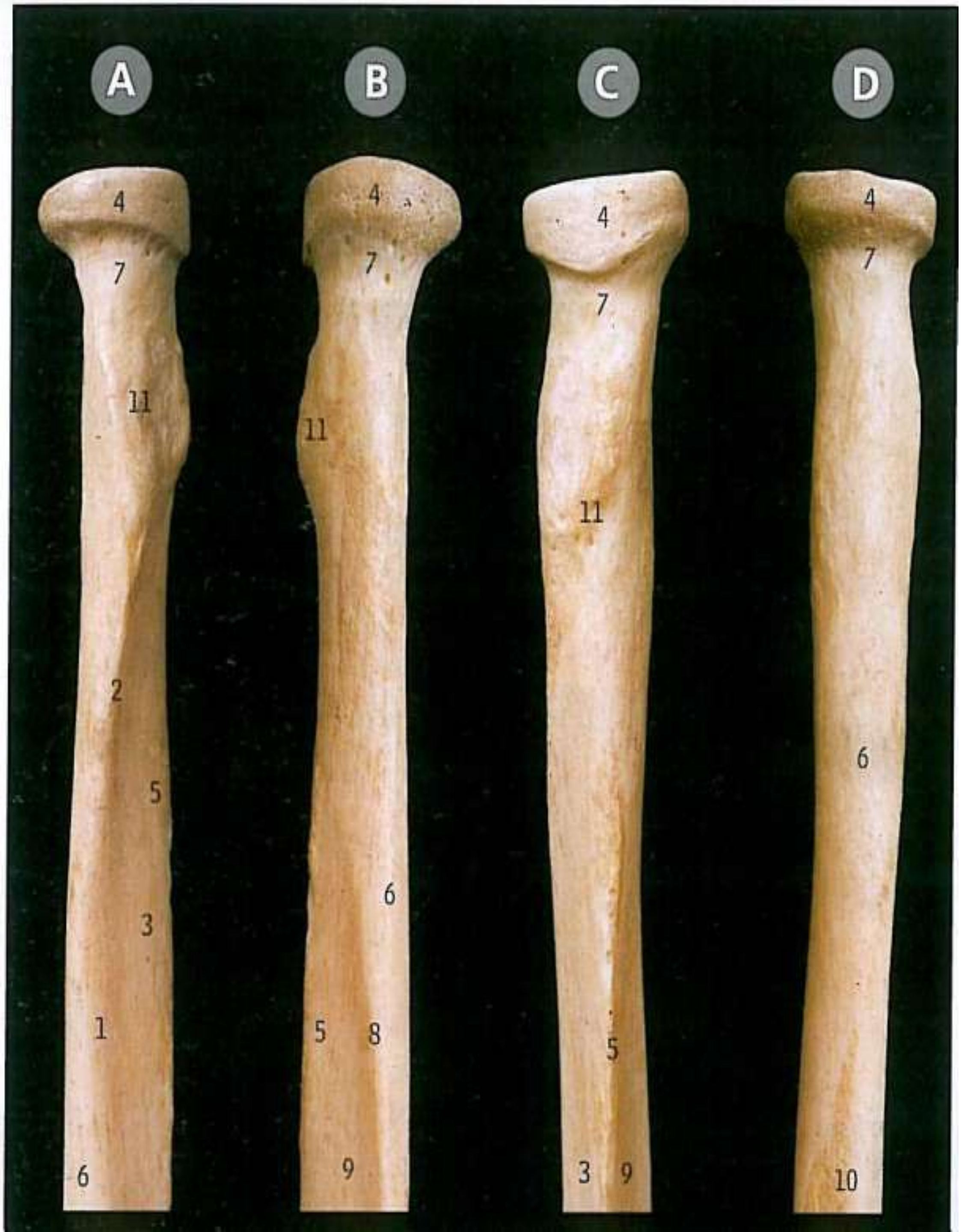
1)The upper end is large and hook like (trochlear notch)

2)The lower end is smaller and carries head and styloid process

3)The concavity of the trochlear notch is directed forwards

4)The lateral (interosseous)border is sharp

upper end


A
B
C
D
4
7
11
2
5
3
1
6
4
7
11
6
5
8
9
4
7
11
5
3
9
4
7
6
10

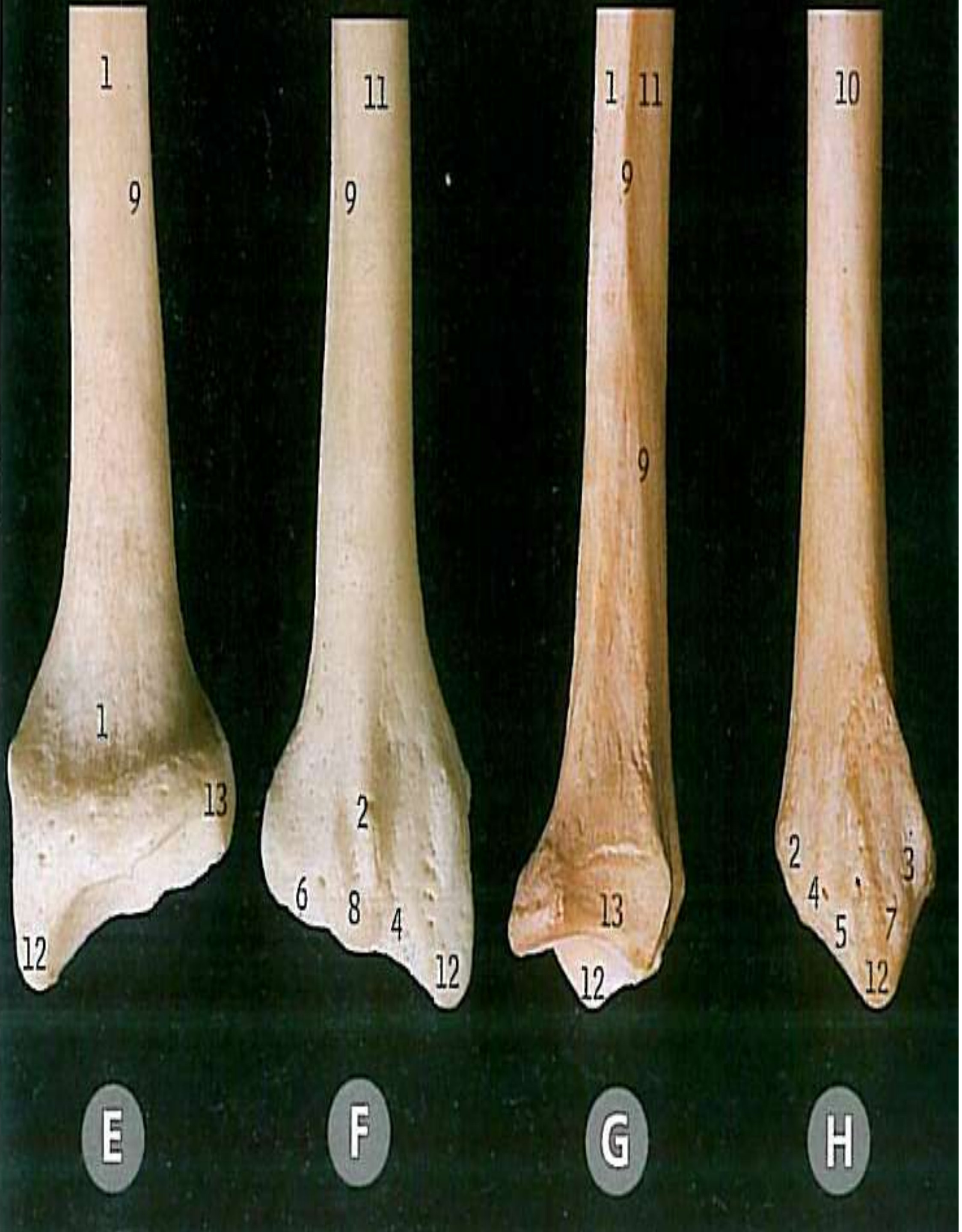
Ⓐ from the front

Ⓑ from behind

Ⓒ from the medial side

Ⓓ from the lateral side

1	Anterior border
2	Anterior oblique line
3	Anterior surface
4	Head
5	Interosseous border
6	Lateral surface
7	Neck
8	Posterior border
9	Posterior surface
10	Rough area for pronator teres
11	Tuberosity



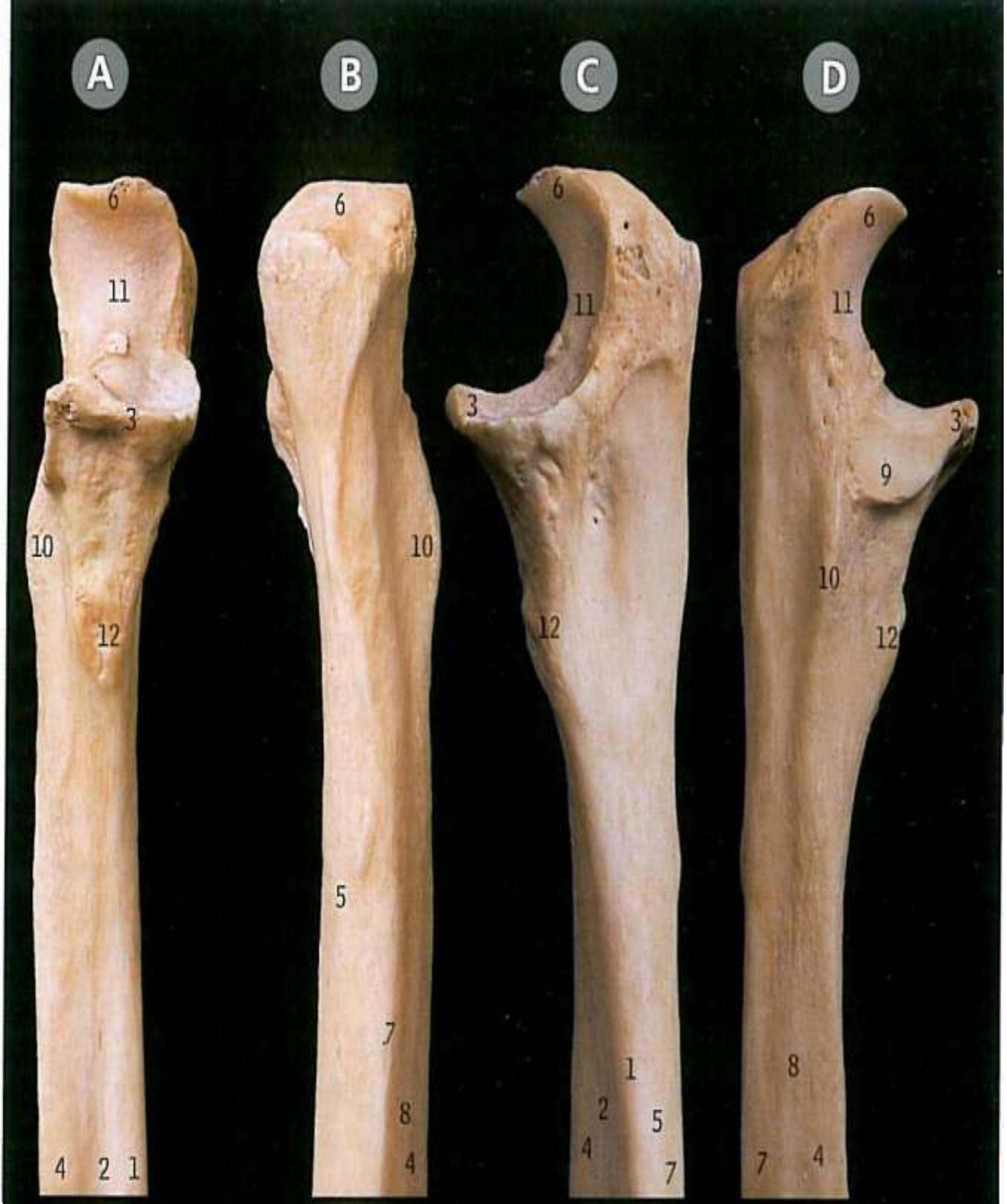
E from the front

F from behind

G from the medial side

H from the lateral side

1 Anterior surface
2 Dorsal tubercle
3 Groove for abductor pollicis longus
4 Groove for extensor carpi radialis brevis
5 Groove for extensor carpi radialis longus
6 Groove for extensor digitorum and extensor indicis
7 Groove for extensor pollicis brevis
8 Groove for extensor pollicis longus
9 Interosseous border
10 Lateral surface
11 Posterior surface
12 Styloid process
13 Ulnar notch


A
6
11
3
10
12
4
2
1
B
6
10
5
7
8
4
C
6
11
3
12
1
2
5
4
7
D
6
11
3
9
10
12
8
7
4

upper end

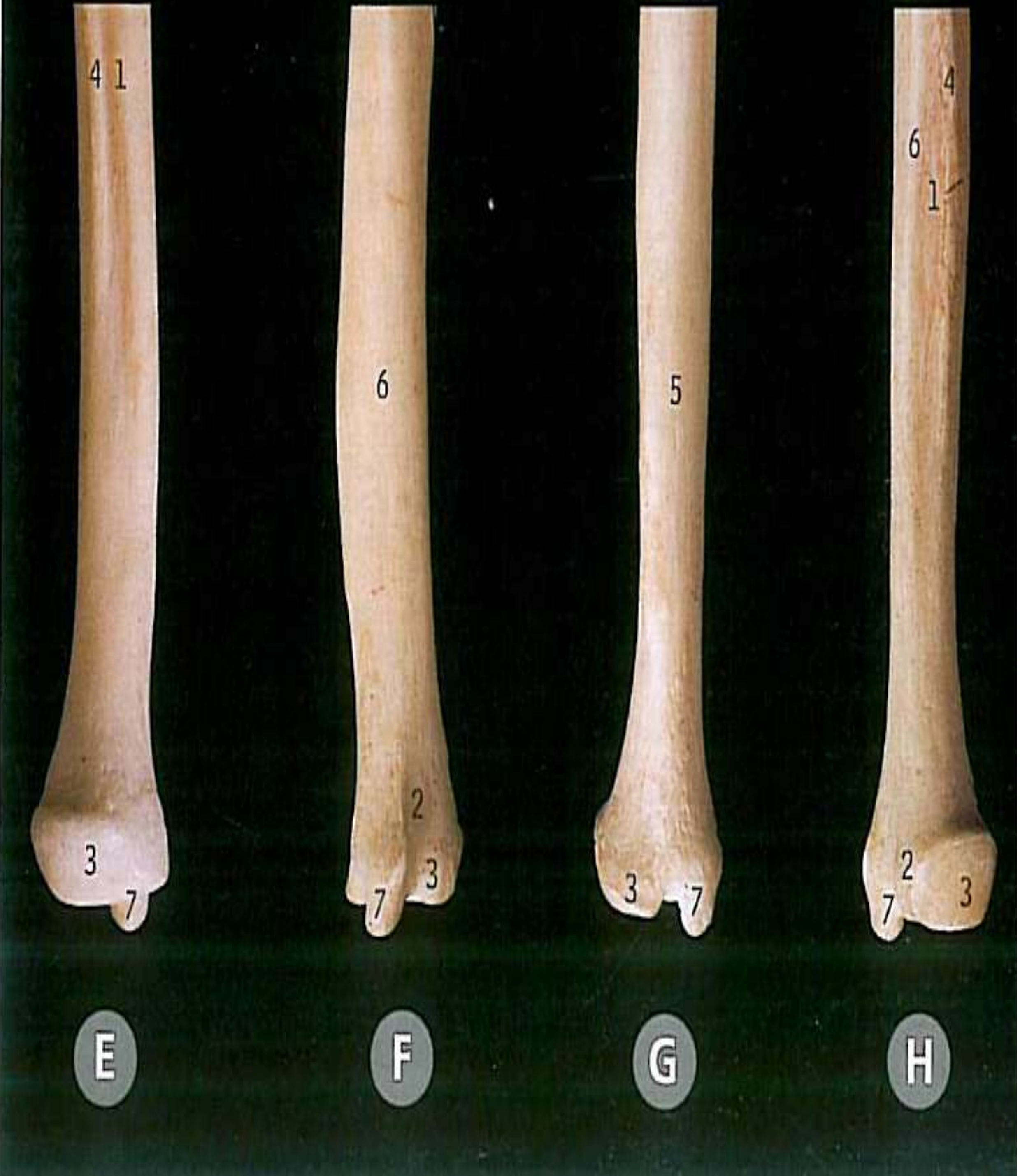
Ⓐ from the front

Ⓑ from behind

Ⓒ from the medial side

Ⓓ from the lateral side

1 Anterior border
2 Anterior surface
3 Coronoid process
4 Interosseous border
5 Medial surface
6 Olecranon
7 Posterior border
8 Posterior surface
9 Radial notch
10 Supinator crest
11 Trochlear notch
12 Tuberosity

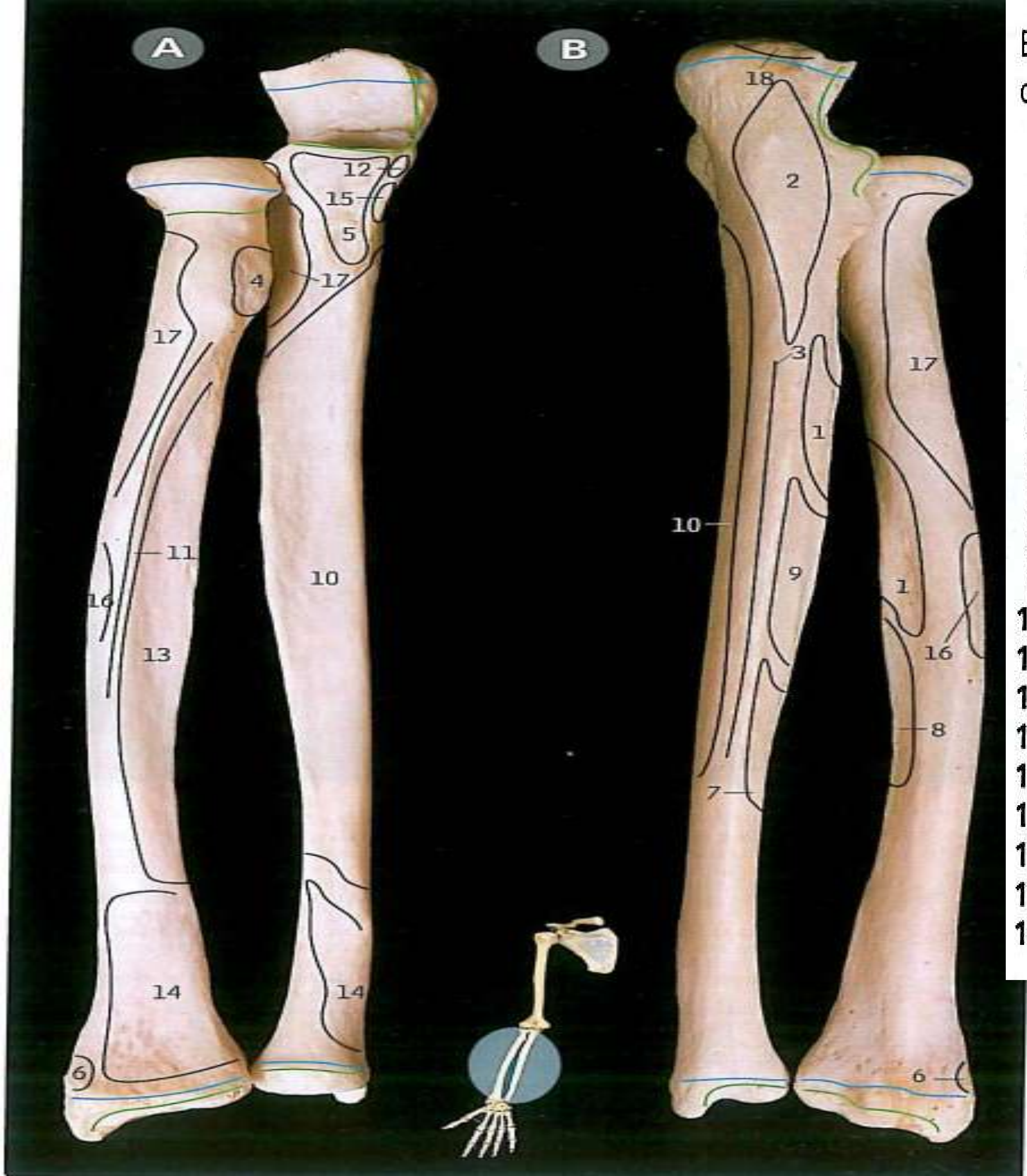


Right ulna

lower end

- **E** from the front
- **F** from behind
- **G** from the medial side
- **H** from the lateral side

1 Anterior surface
2 Groove for extensor carpi ulnaris
3 Head
4 Interosseous border
5 Medial surface
6 Posterior surface
7 Styloid process



Blue lines = epiphysial lines; green lines = capsular attachments of elbow and wrist joints

1 Abductor pollicis longus
2 Anconeus
3 Aponeurotic attachment of flexor digitorum profundus, flexor carpi ulnaris and extensor carpi ulnaris
4 Biceps
5 Brachialis
6 Brachioradialis
7 Extensor indicis
8 Extensor pollicis brevis
9 Extensor pollicis longus
10 Flexor digitorum profundus
11 Flexor digitorum superficialis, radial head
12 Flexor digitorum superficialis, ulnar head
13 Flexor pollicis longus
14 Pronator quadratus
15 Pronator teres, ulnar head
16 Pronator teres
17 Supinator
18 Triceps

A from the front

B from behind

Skeleton of hands

Is divide into 3 segments:

1)Consist of 8 short carpal bones arranged in 2 rows (From lateral to medial)

a)Proximal row : formed of 4 bones

Scaphoid

Lunate

Tiquetral

Pisiform

b)Distal row :formed of 4 bones

Trapezium

Trapezoid

Capitate

Hamate

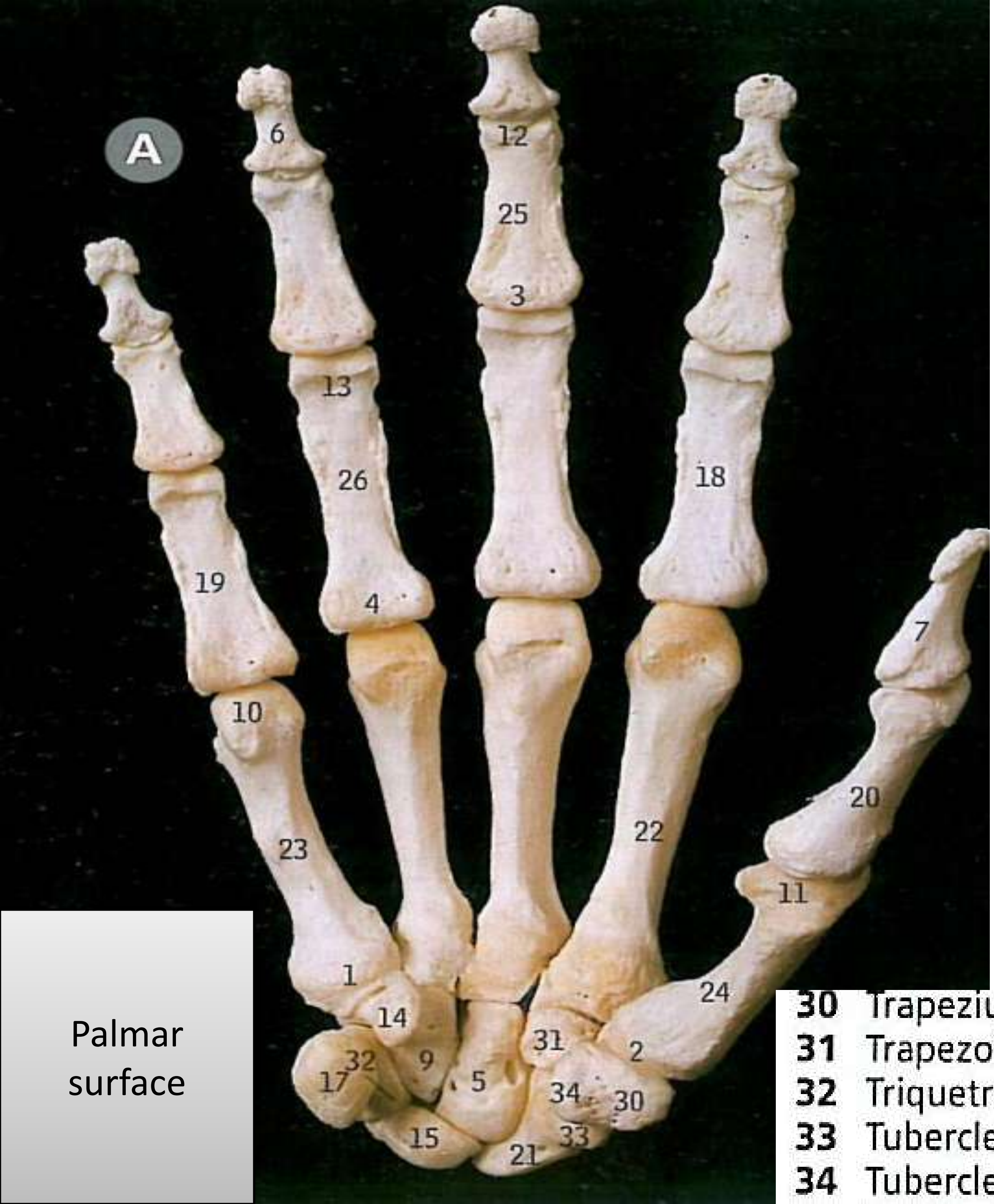
2)Metacarpals:5 short long bones which are numbered from lat to med

First belong the thumb while the fifth belong the littile finger

3)phalanges:consist of 14 long bones which are arranged as follows

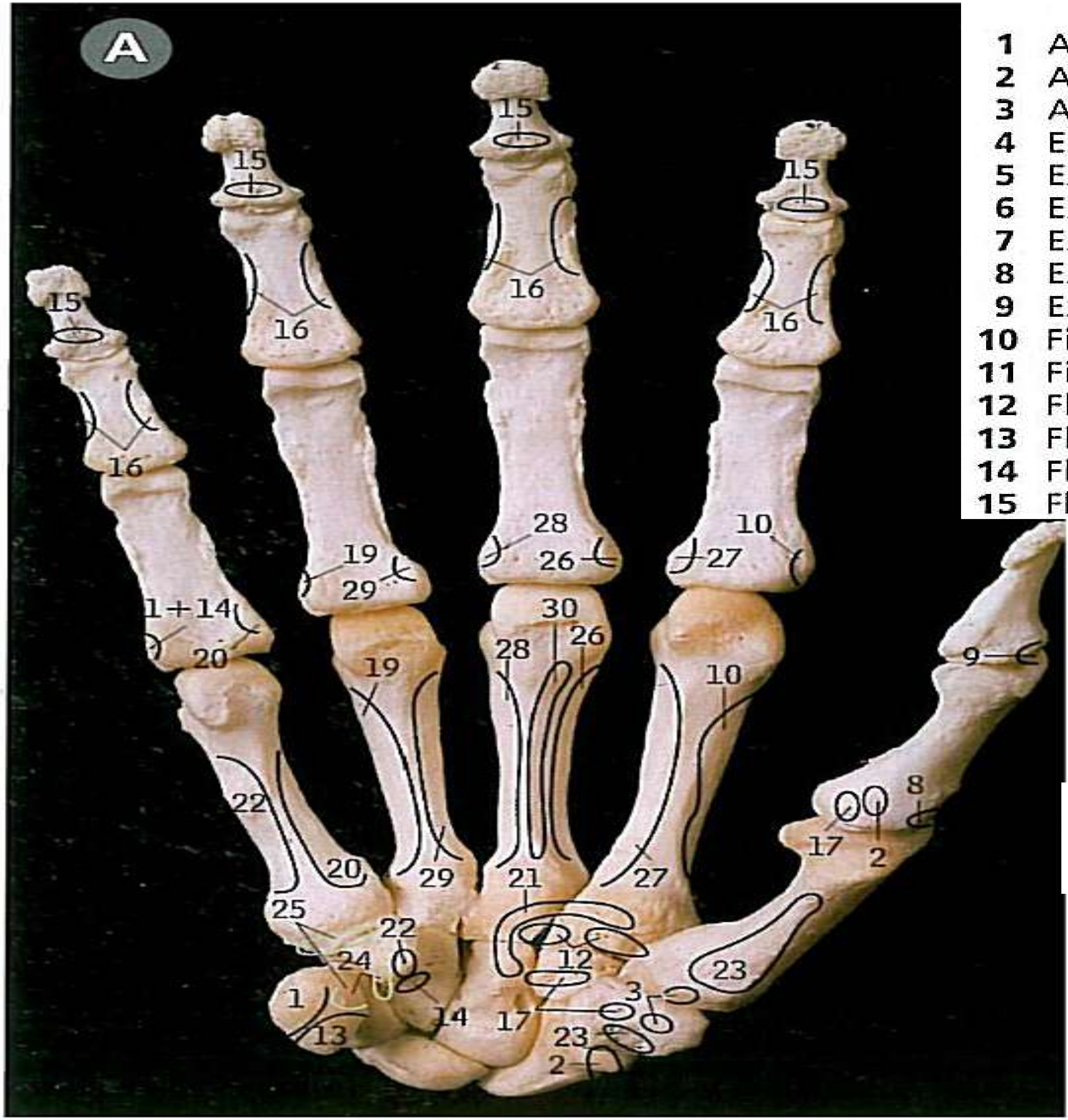
a)The thumb has only 2 phalanges proximal and distal

b)Each of med 4 fingers has 3 phalanges .proximal .middle .distal



Palmar surface

1	Base of fifth metacarpal
2	Base of first metacarpal
3	Base of middle phalanx of middle finger
4	Base of proximal phalanx of ring finger
5	Capitate
6	Distal phalanx of ring finger
7	Distal phalanx of thumb
9	Hamate
10	Head of fifth metacarpal
11	Head of first metacarpal
12	Head of middle phalanx of middle finger
13	Head of proximal phalanx of ring finger
14	Hook of hamate
15	Lunate
17	Pisiform
18	Proximal phalanx of index finger
19	Proximal phalanx of little finger
20	Proximal phalanx of thumb
21	Scaphoid
22	Shaft of second metacarpal
23	Shaft of fifth metacarpal
24	Shaft of first metacarpal
25	Shaft of middle phalanx of middle finger
26	Shaft of proximal phalanx of ring finger
30	Trapezium
31	Trapezoid
32	Triquetral
33	Tubercle of scaphoid
34	Tubercle of trapezium


A
15
15
15
15
16
16
16
16
28
10
19
26
27
29
1+14
20
30
28
26
19
10
9
22
8
20
29
21
27
17
2
25
22
24
12
23
1
3
14
17
13
23
2

1 Abductor digiti minimi
2 Abductor pollicis brevis
3 Abductor pollicis longus
4 Extensor carpi radialis brevis
5 Extensor carpi radialis longu
6 Extensor carpi ulnaris
7 Extensor expansion
8 Extensor pollicis brevis
9 Extensor pollicis longus
10 First dorsal interosseous
11 First palmar interosseous
12 Flexor carpi radialis
13 Flexor carpi ulnaris
14 Flexor digiti minimi brevis
15 Flexor digitorum profundus

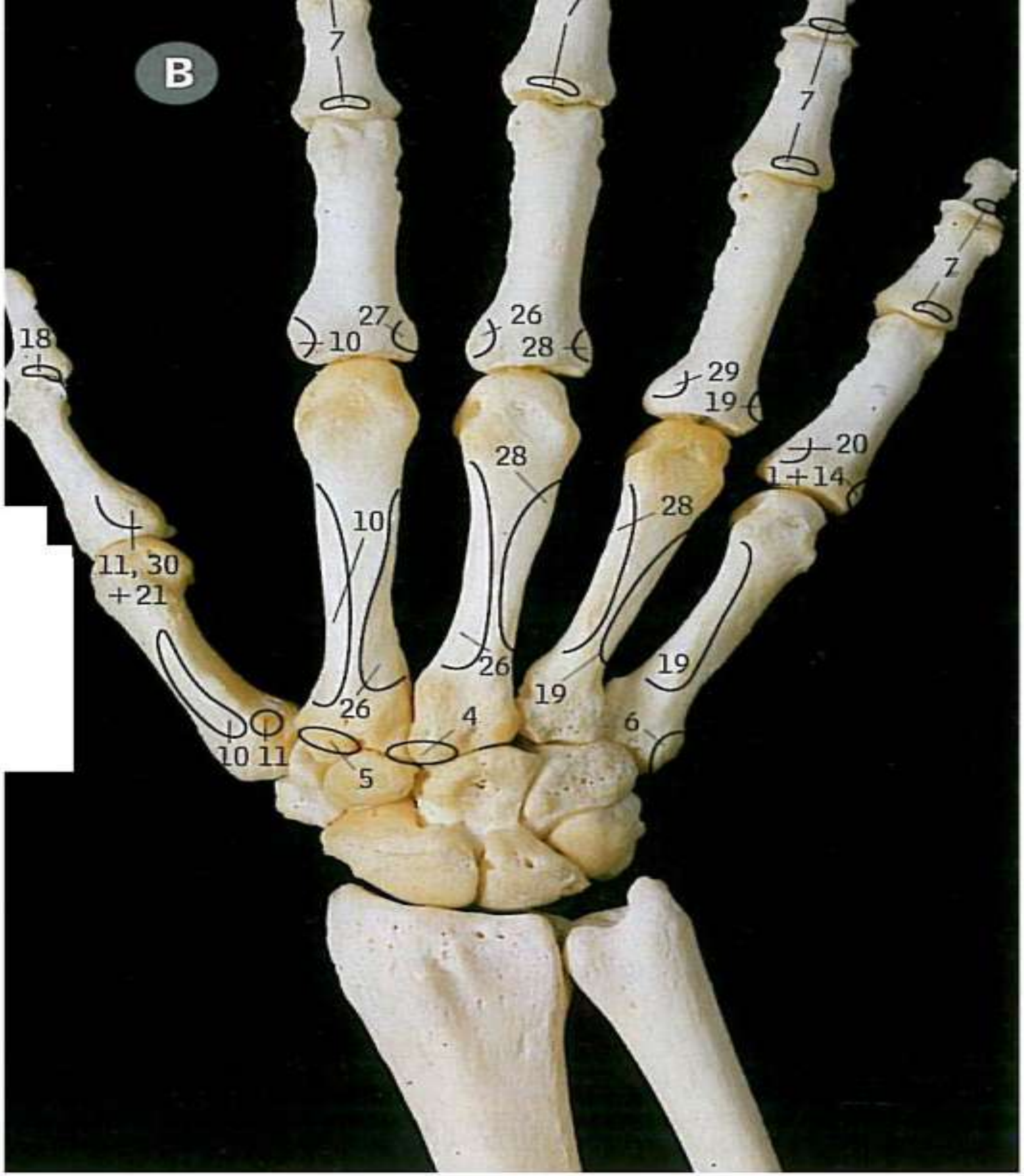
Ⓐ **palmar surface**

بعض البيانات في الشريحة التالية

بعض البيانات في الشريحة السابقة

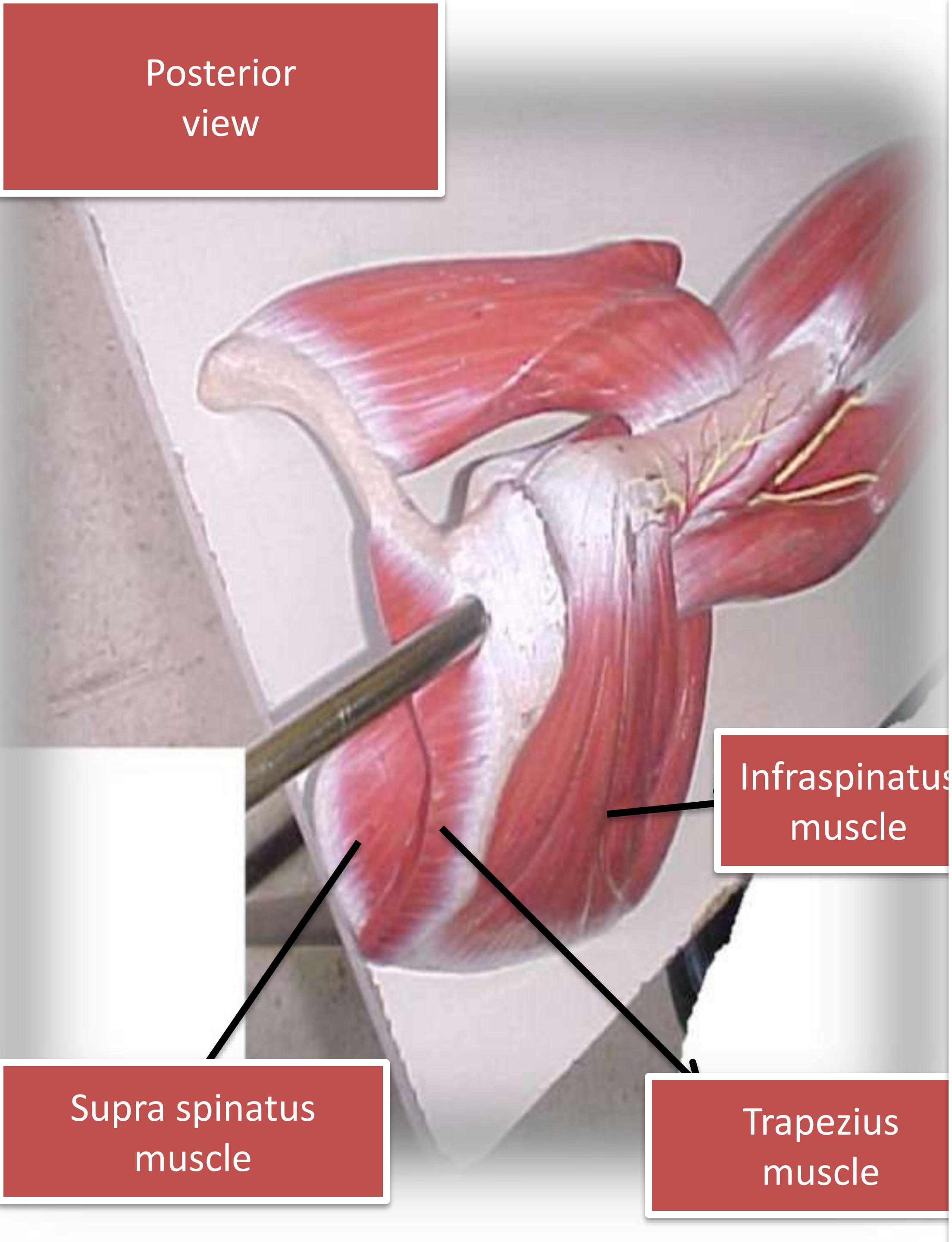
B dorsal surface

16	Flexor digitorum superficialis
17	Flexor pollicis brevis
18	Flexor pollicis longus
19	Fourth dorsal interosseous
20	Fourth palmar interosseous
21	Oblique head of adductor pollicis
22	Opponens digiti minimi
23	Opponens pollicis
24	Pisohamate ligament
25	Pisometacarpal ligament
26	Second dorsal interosseous
27	Second palmar interosseous
28	Third dorsal interosseous
29	Third palmar interosseous
30	Transverse head of adductor pollicis


B
7
7
7
7
18
27
10
26
28
29
19
20
1+14
28
10
28
11, 30
+21
26
19
19
26
4
6
10
11
5

Muscles of the shoulder

Posterior view



Infraspinatus muscle

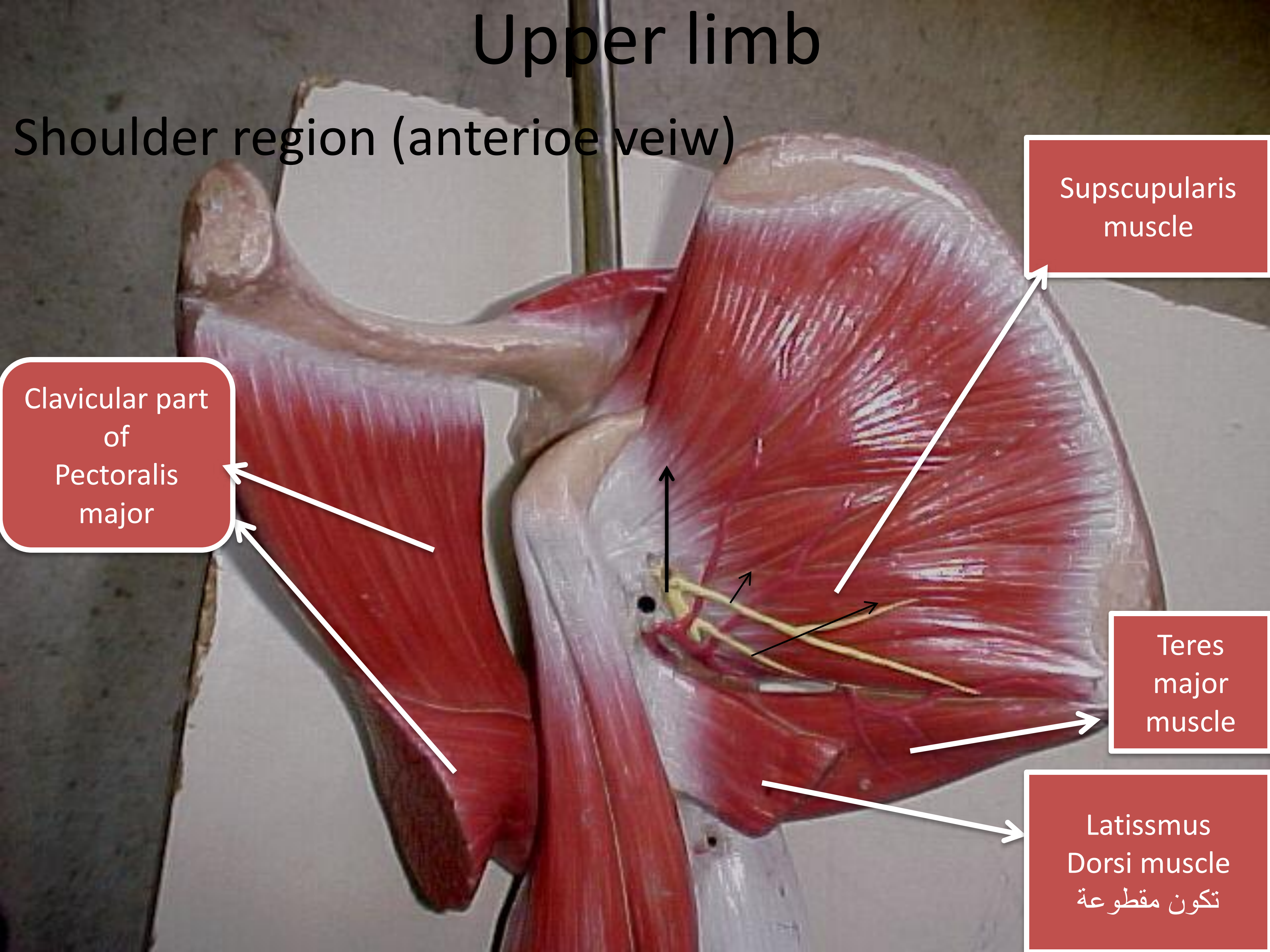
Supra spinatus muscle

Trapezius muscle

1)Pectoralis major muscle :supply by medial & lateral
2)Trapezius muscle :spinal acssory (motor)
From C3 .C4
3)SUPRASPINATUS :SUPRASCAPULAR NERVE
4)INFRASPINATUS MUSCLE :SUPRASCAPULAR NERVE
5)TERSES MINOR:AXILLARY NEVREV
6)TERES MAJOR:
LOWER SUBSCAPULAR NERVE
7)SCAPULARIS MUSCLE:UPPER & LOWER SUBSCAPULAR NERVE

Upper limb

Shoulder region (anterioe veiw)

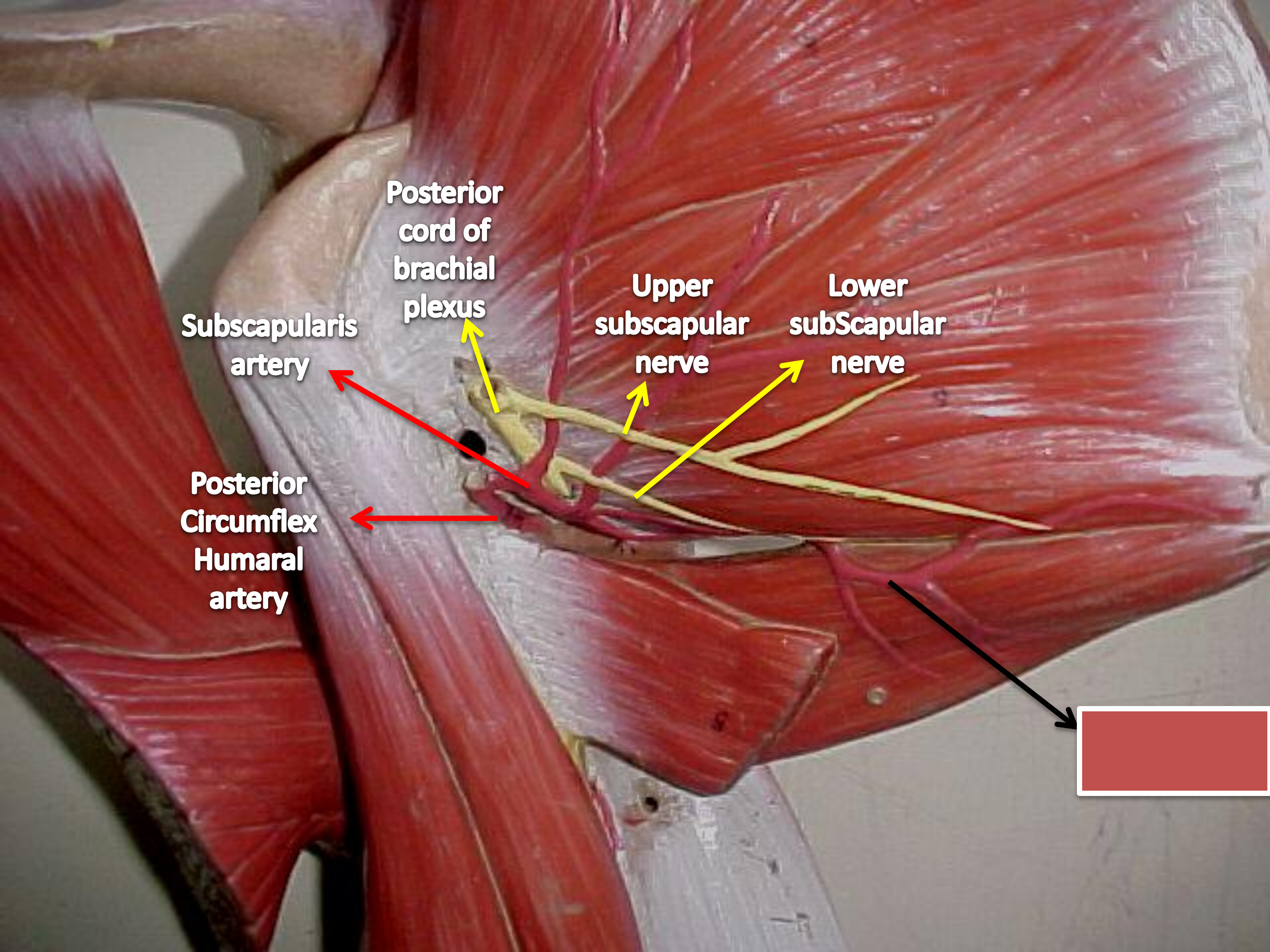


Supscupularis muscle

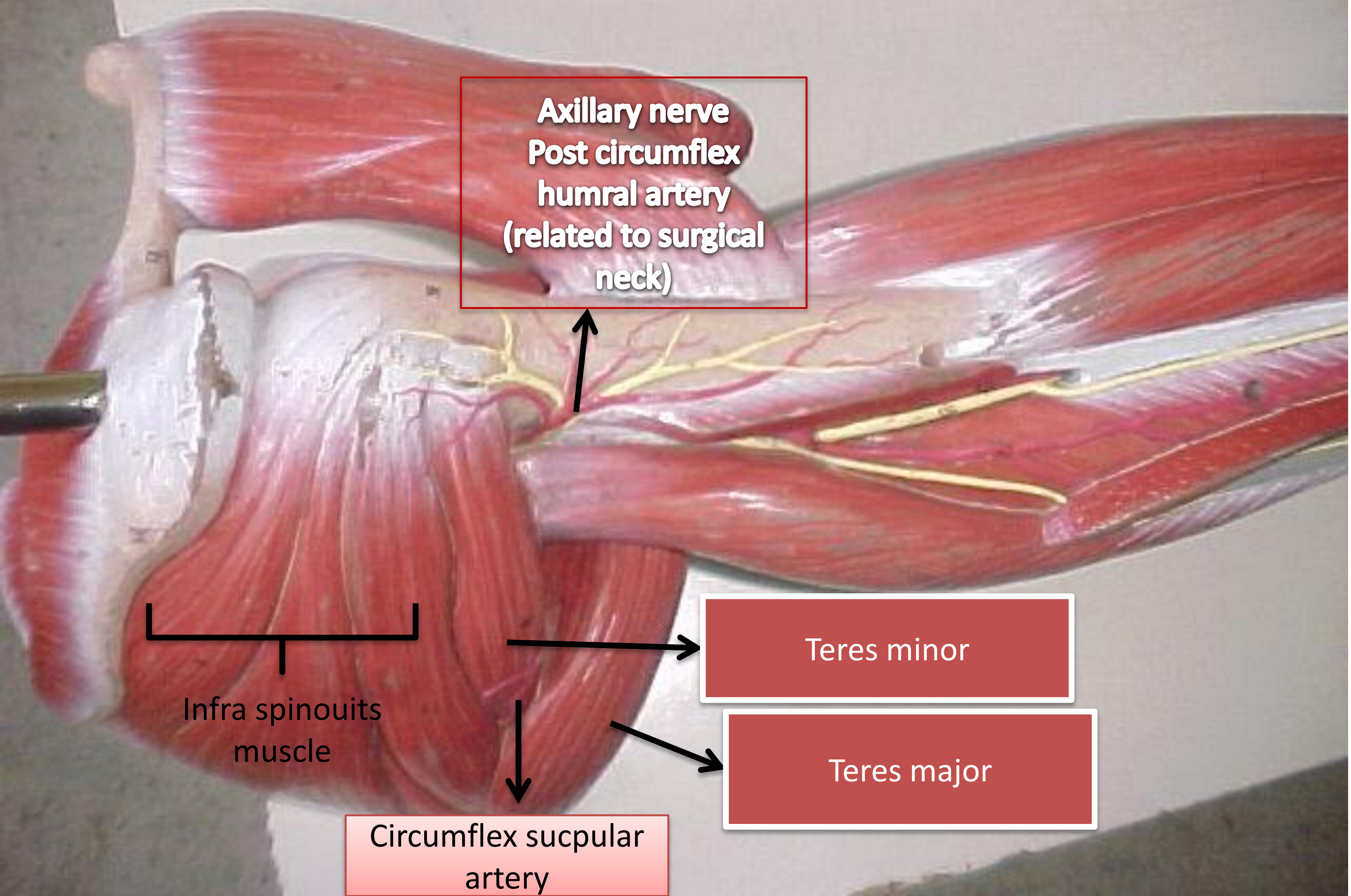
Clavicular part of Pectoralis major

Teres major muscle

Latissmus Dorsi muscle تكون مقطوعة


Posterior cord of brachial plexus
Subscapularis artery
Upper subscapular nerve
Lower subScapular nerve
Posterior Circumflex Humaral artery

Posterior veiw



Axillary nerve
Post circumflex humral artery (related to surgical neck)

Infra spinouits muscle

Teres minor

Teres major

Circumflex sucpular artery

ARM

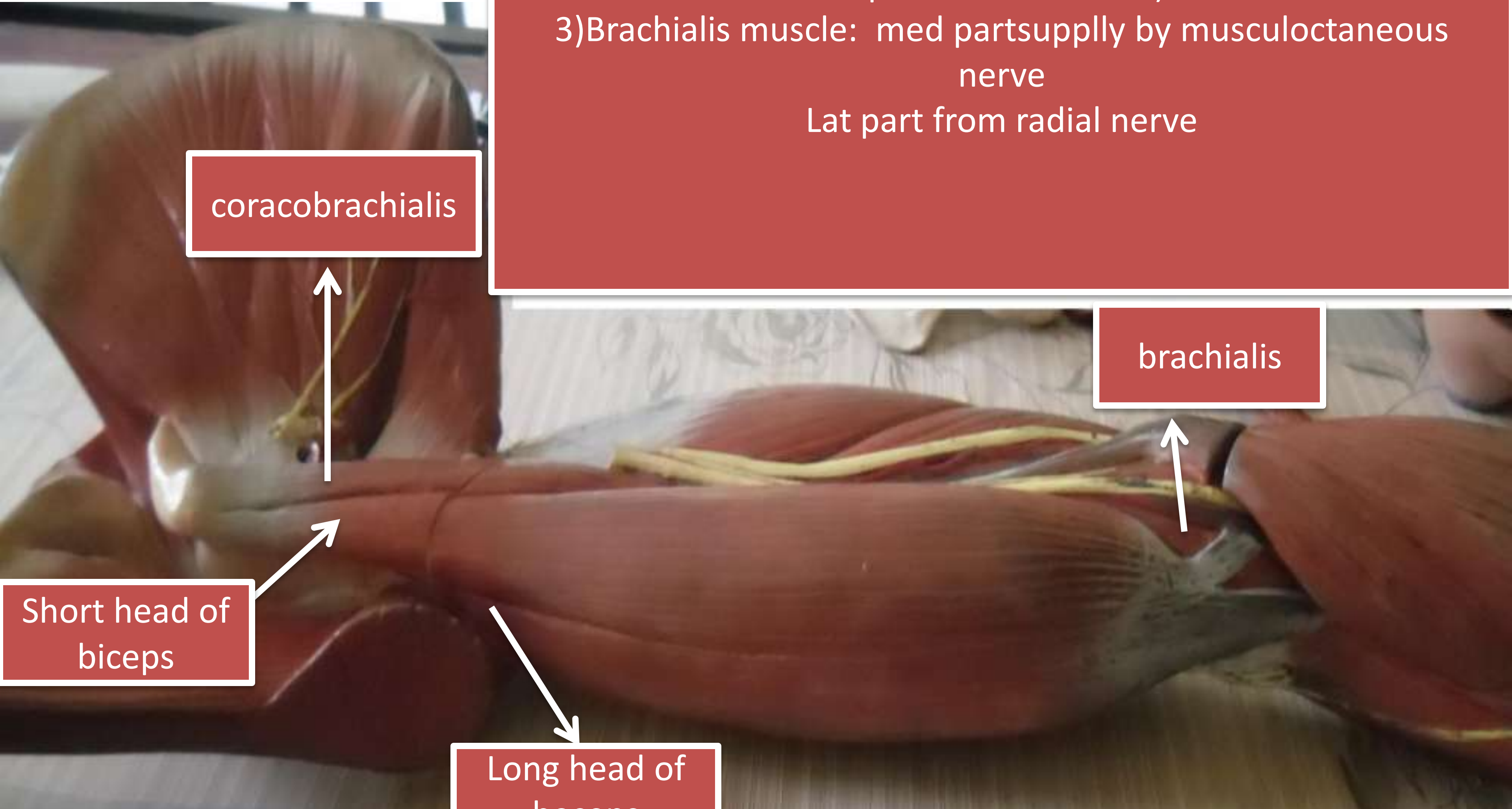
anterior compartment there are three muscles

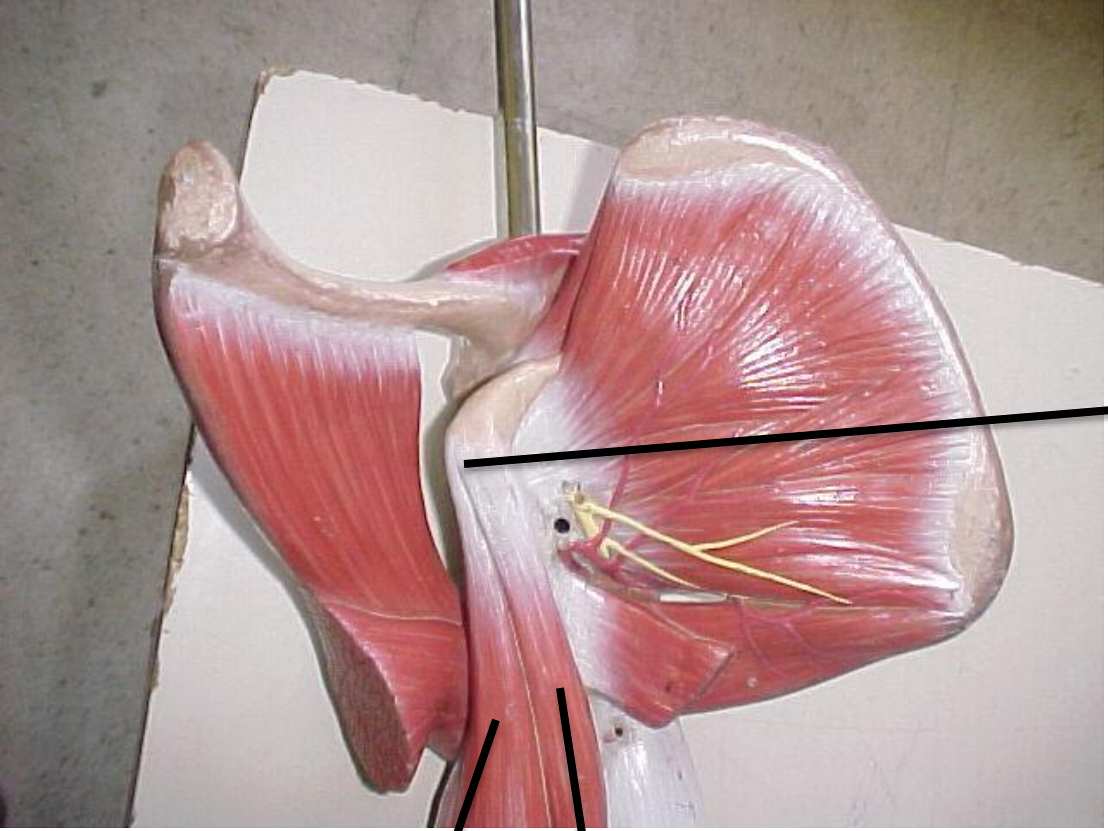
1)BISEPS BRACHIL MUSCLE: supply by musculo-cutaneous (each head is supplied separatiely)

2)Coracobrachialis muscle supply by musculo-cutaneous(before it pierces the muscle)

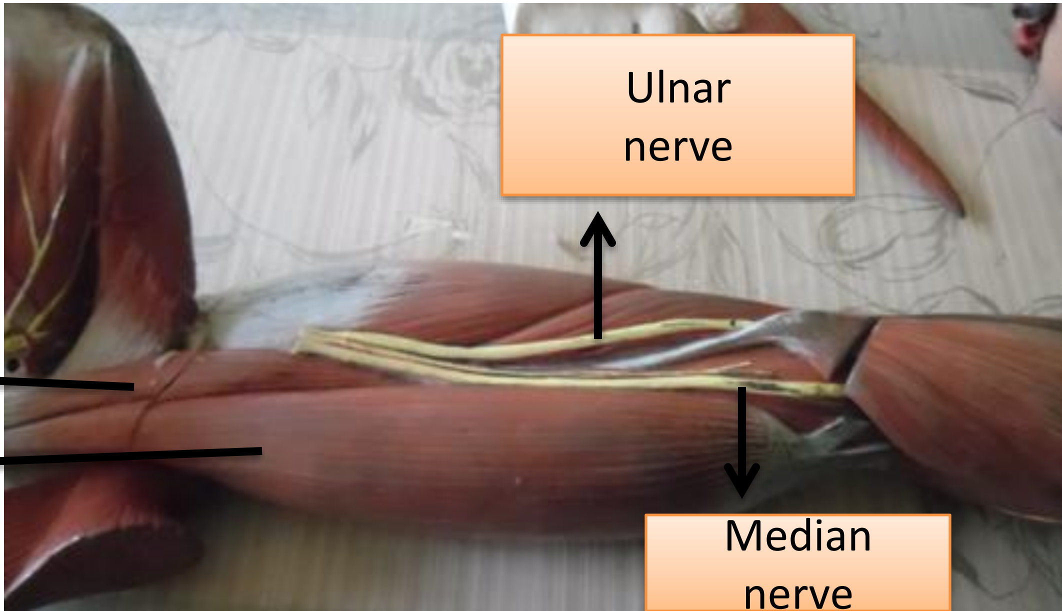
3)Brachialis muscle: med partsupplly by musculoctaneous nerve

Lat part from radial nerve


coracobrachialis
brachialis
Short head of biceps
Long head of biceps



Common tendon



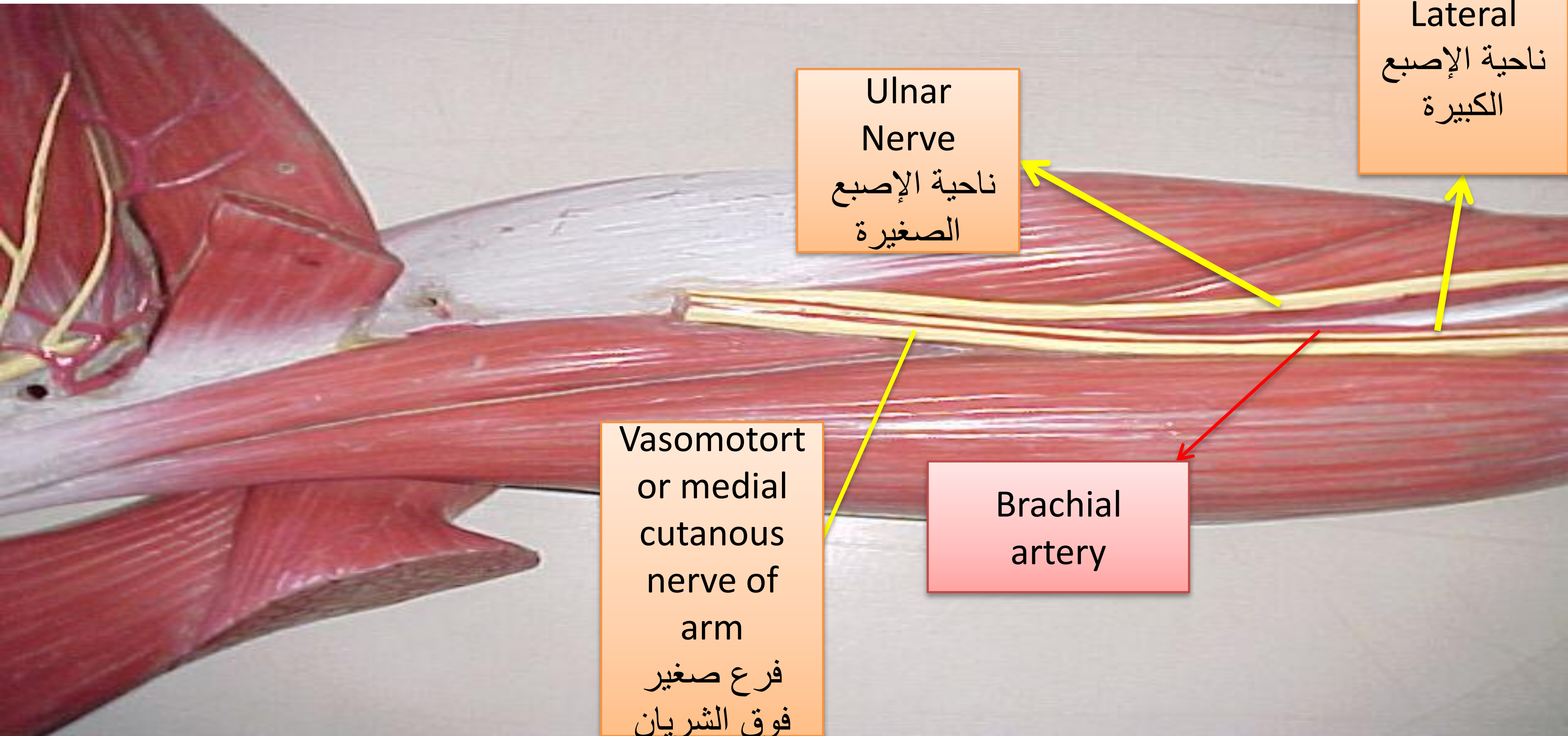
Ulnar nerve

coracobrichalis

bicepis

Median nerve

Structures in the front of the arm



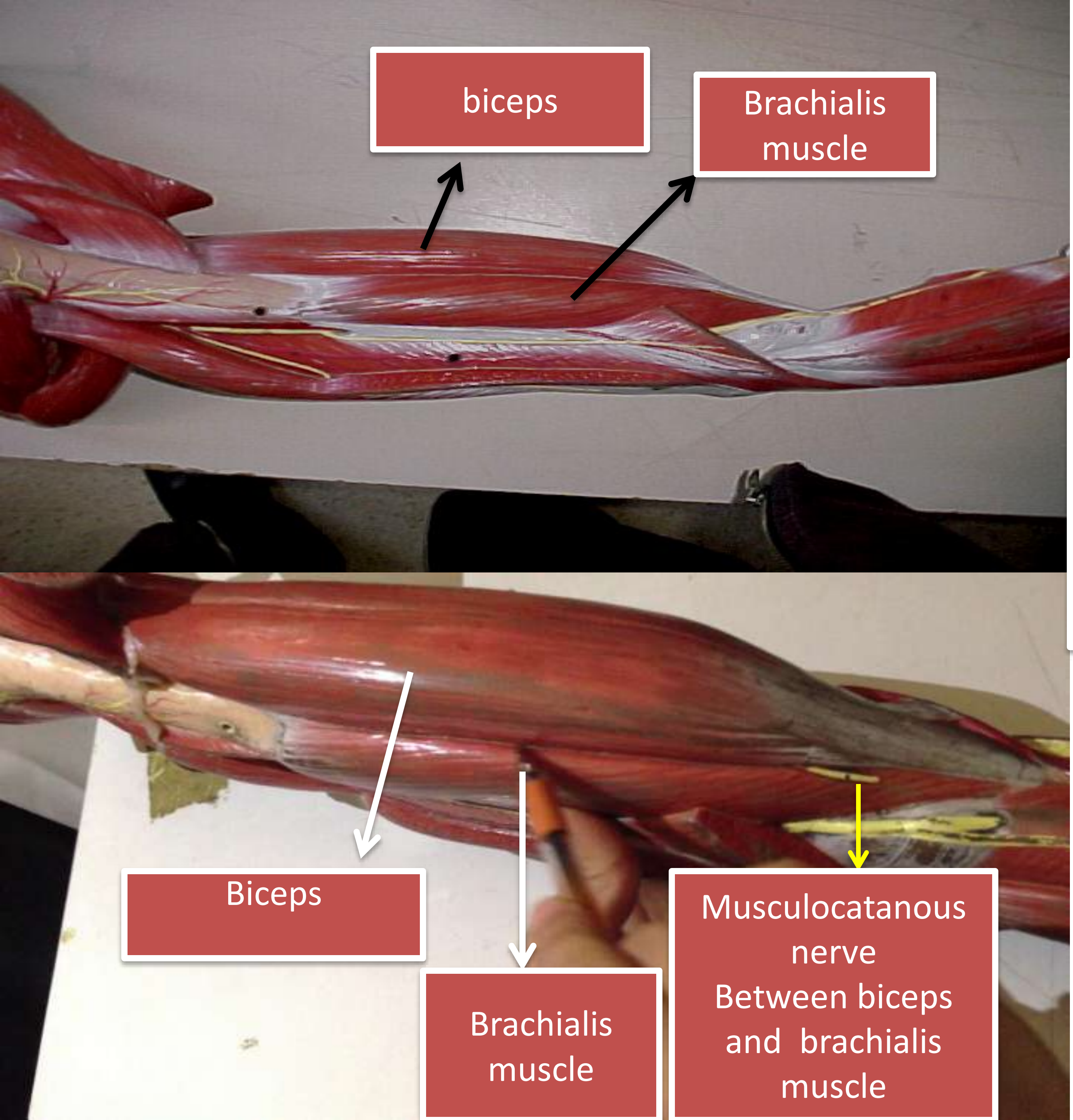
Ulnar Nerve
ناحية الإصبع الصغيرة

Median nevrve
Lateral
ناحية الإصبع الكبيرة

Vasomotortor medial cutanous nerve of arm
فرع صغير فوق الشريان

Brachial artery

Muscles of the arm from laterai side



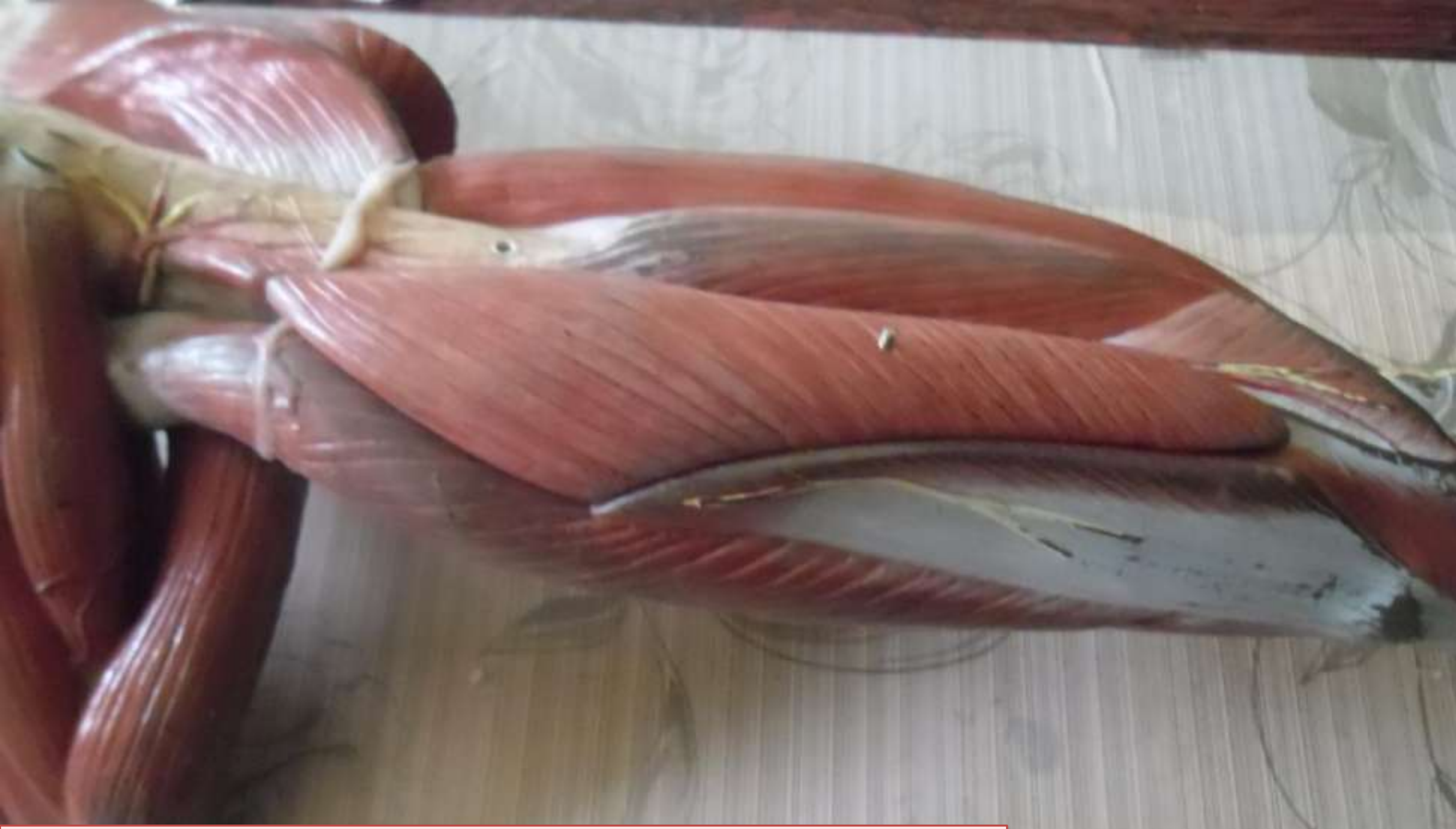
biceps

Brachialis muscle

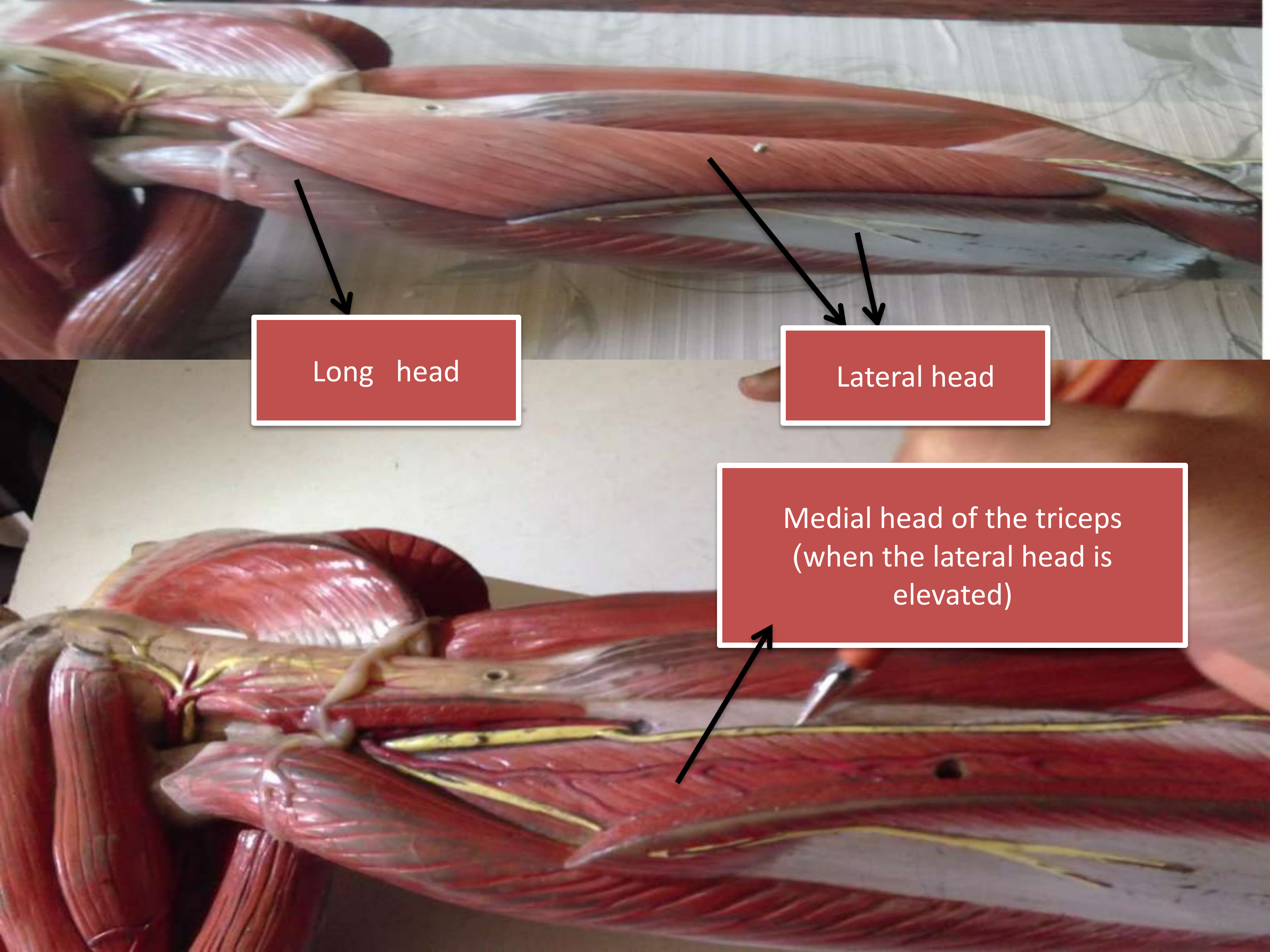
Biceps

Brachialis muscle

Musculocatanous nerve
Between biceps and brachialis muscle



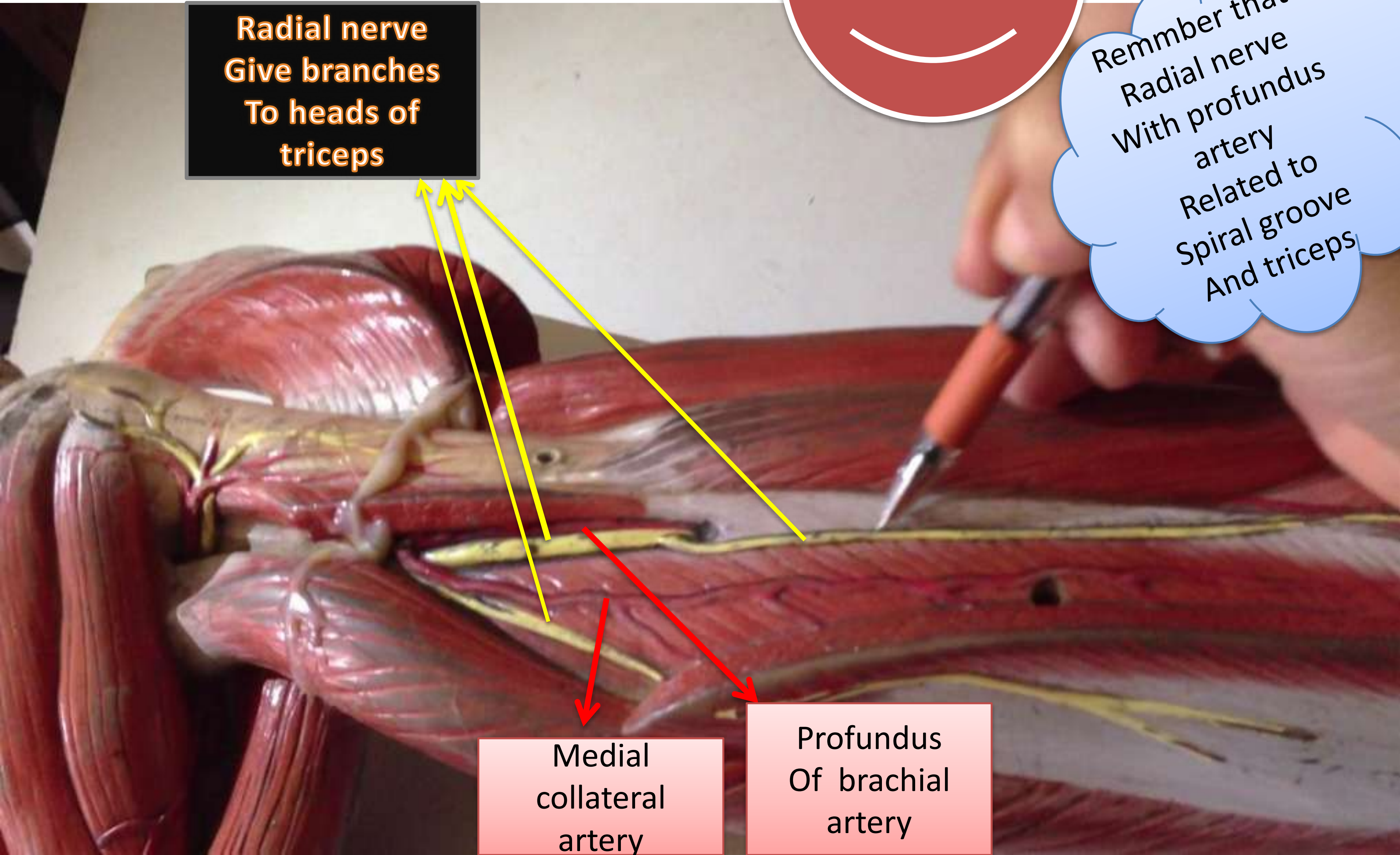
Posterior compartment of arm
Only triceps
1)Medial head
2)Lateral head
3)Long head



Long head

Lateral head

Medial head of the triceps (when the lateral head is elevated)



Radial nerve
Give branches
To heads of
triceps

Remmber that
Radial nerve
With profundus
artery
Related to
Spiral groove
And triceps

Medial
collateral
artery

Profundus
Of brachial
artery

Muscles of forarm

Muscles of front of the forarm(flexor group)

superficial group

There are five muscles (from lateral to medial):

1)Pronator teres muscle

2)Flexor carpi radialis

3)Palmaris longus

4)Flexor digitorum superficialis

5)Flexor carpi ulnaris

All of supply by median nerve except the flexor carpi ulnaris supply by ulnar nerve.

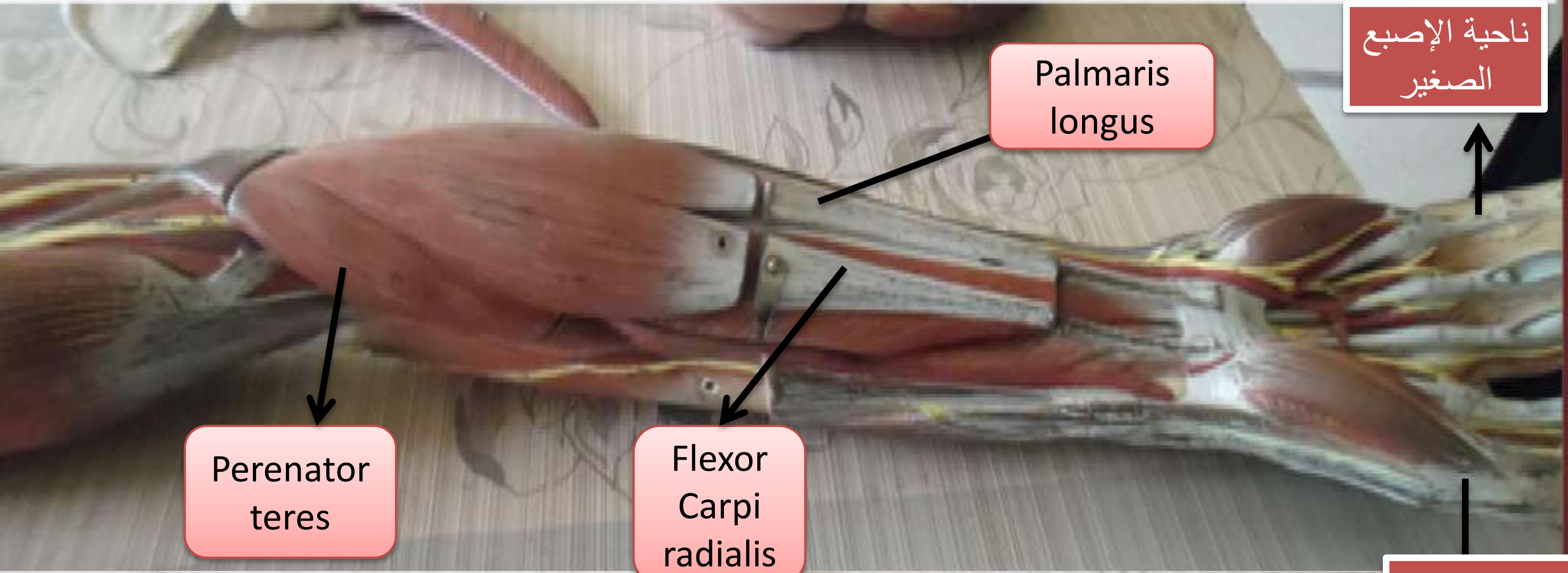
Deep group;(there are three muscles)

1)Flexor pollicis longus

2)Flexor digitorum profundus

3)Pronator quadratus

all of theme supply by anterior interosseous nerve except medial part of the flexor digitorum profundus supply by ulnar nerve.



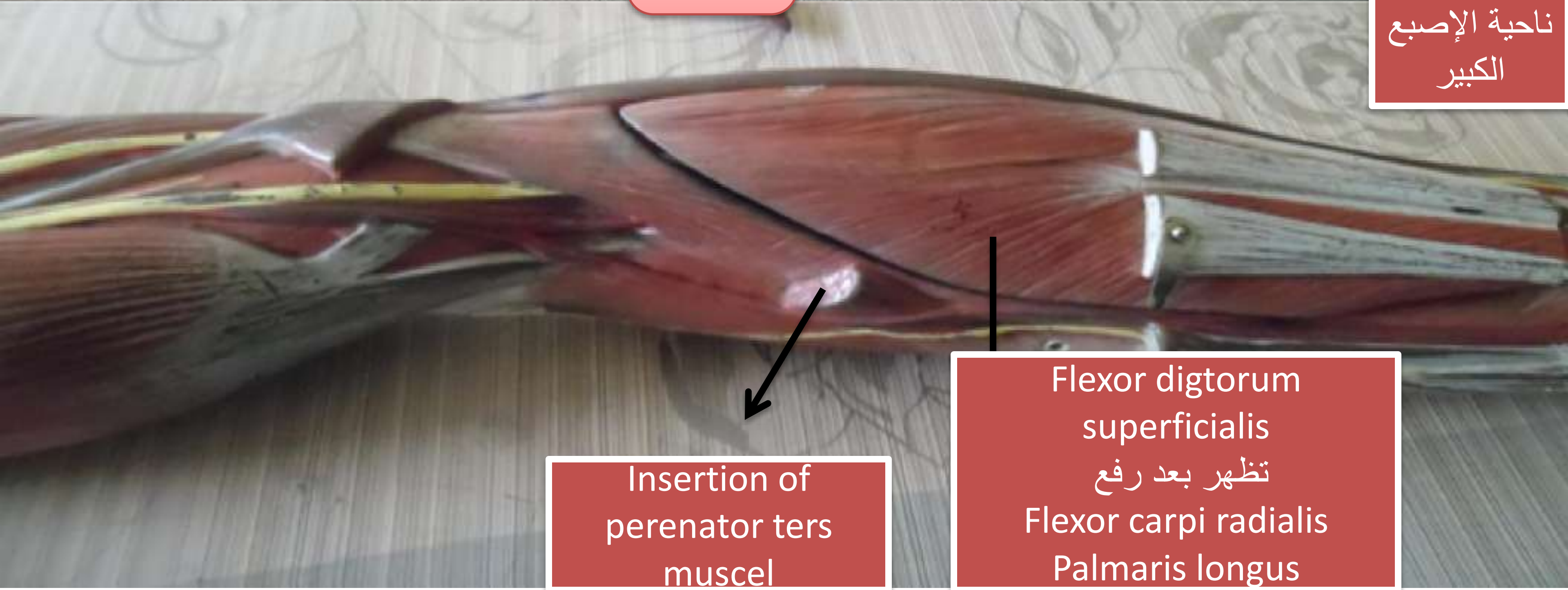
ناحية الإصبع الصغير

Palmaris longus

Perenator teres

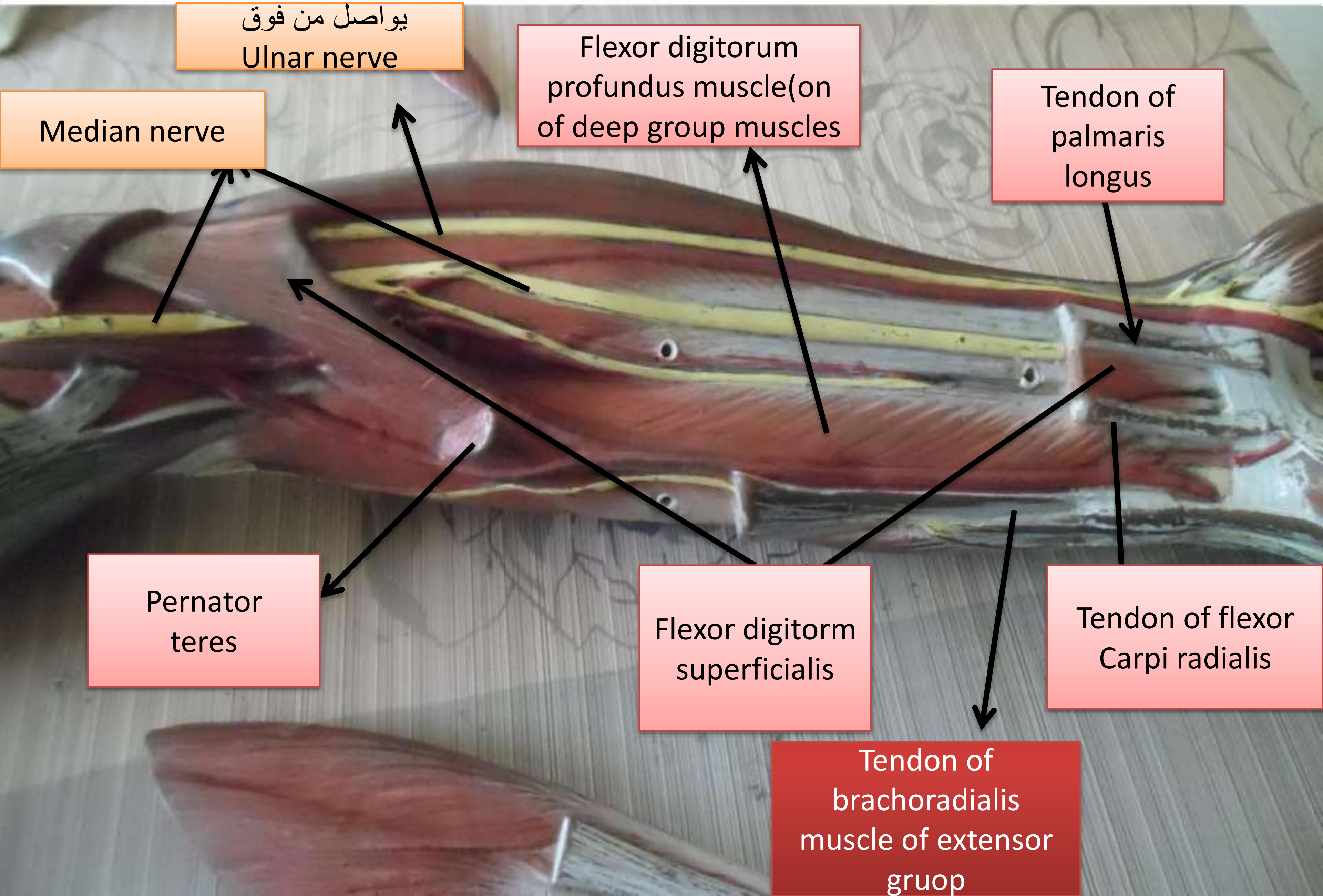
Flexor Carpi radialis

ناحية الإصبع الكبير



Flexor digtorum superficialis
تظهر بعد رفع
Flexor carpi radialis
Palmaris longus

Insertion of perenator ters muscel



يواصل من فوق
Ulnar nerve

Median nerve

Flexor digitorum profundus muscle(on of deep group muscles

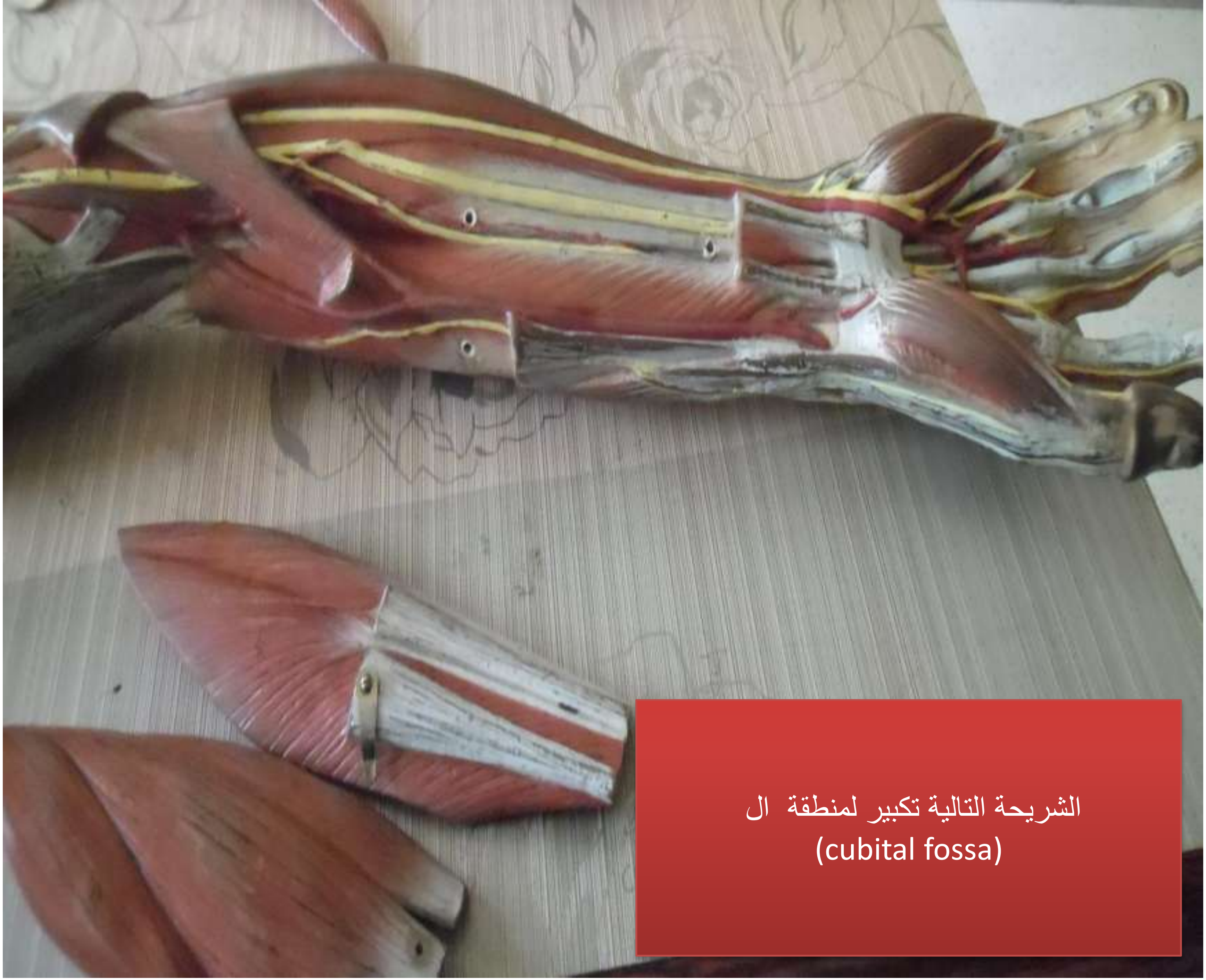
Tendon of palmaris longus

Pernator teres

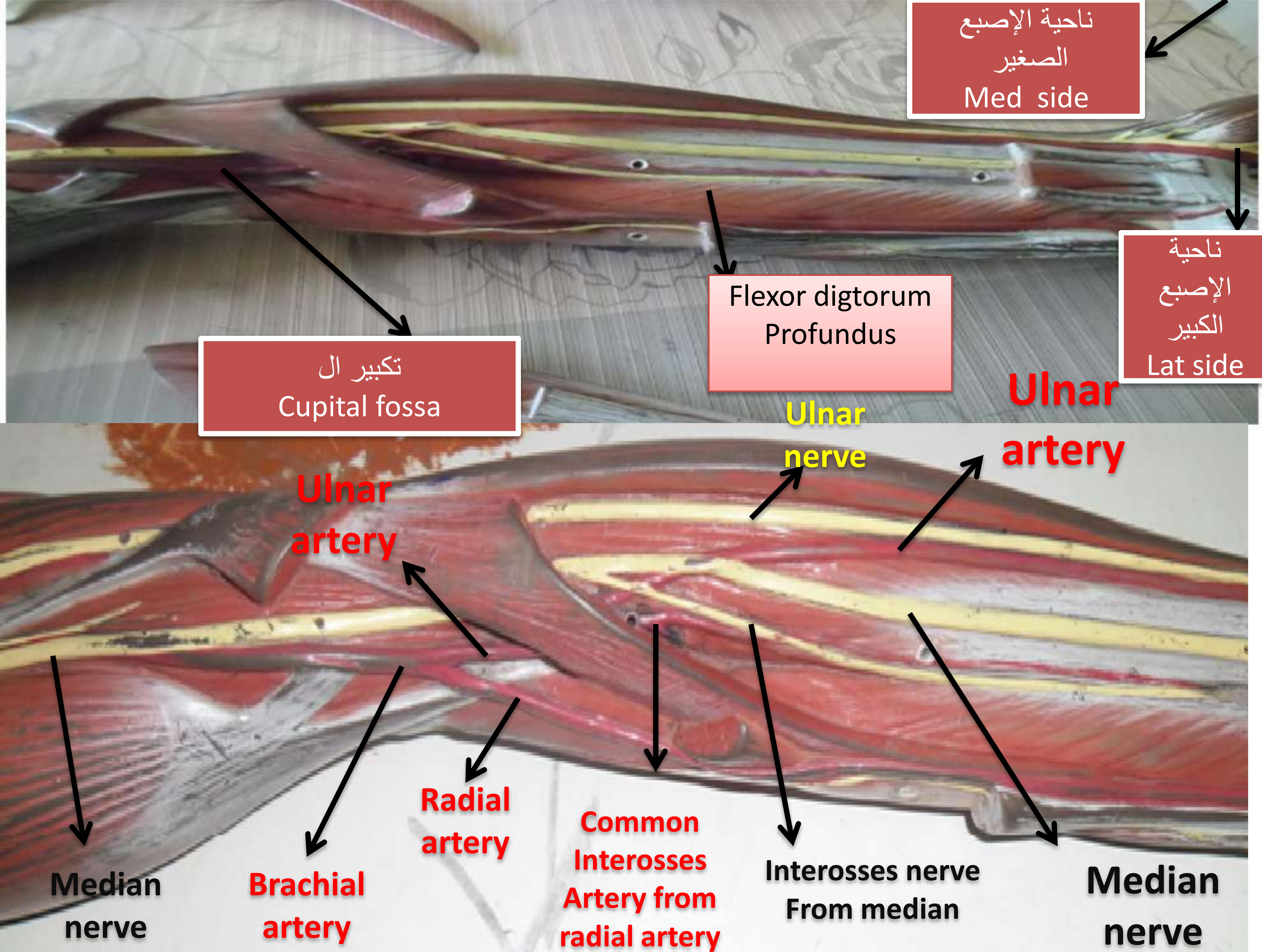
Flexor digitorm superficialis

Tendon of flexor Carpi radialis

Tendon of brachoradialis muscle of extensor gruop



الشريحة التالية تكبير لمنطقة ال
(cubital fossa)



ناحية الإصبع الصغير
Med side

ناحية الإصبع الكبير
Lat side

Flexor digtorum
Profundus

تكبير ال
Cupital fossa

Ulnar artery

Ulnar nerve

Ulnar artery

Median nerve

Brachial artery

Radial artery

Common Interosses Artery from radial artery

Interosses nerve
From median

Median nerve

Muscles of the back of forarm

Superficial group there is 7 muscles:

1)Brachioradialis
2)Extensor carpi radialis longus
3)Extensor carpiradialis brevis
4)Extensor digitorum
5)Extensor digiti minimi
6)Extensor carpi ulnaris
7)Anconeus muscle

All of them suuply by posterior interosseeous nerve except brachioradialis .extensor carpi radialis longus .anconeus supply by radial nerve

DEEP GROUP :

1)Supinator

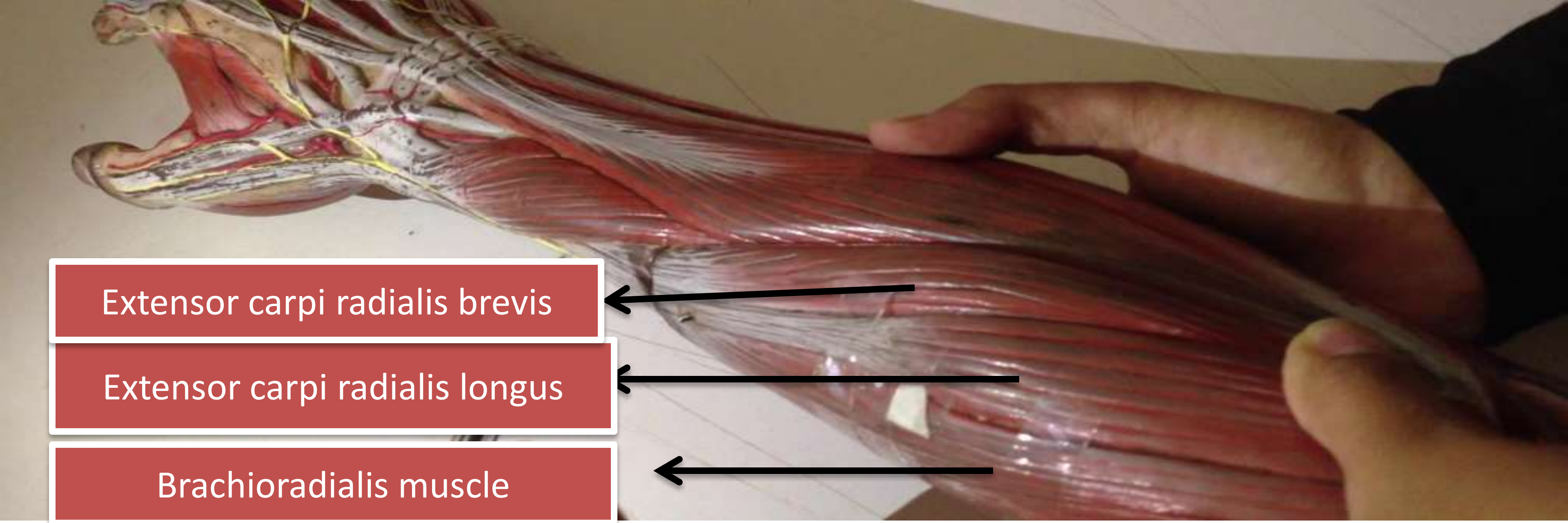
2)Abductor pollicis longus

3)Extensor pollicis brevis

4)Extensor pollicis longus

5)Extensor indicis

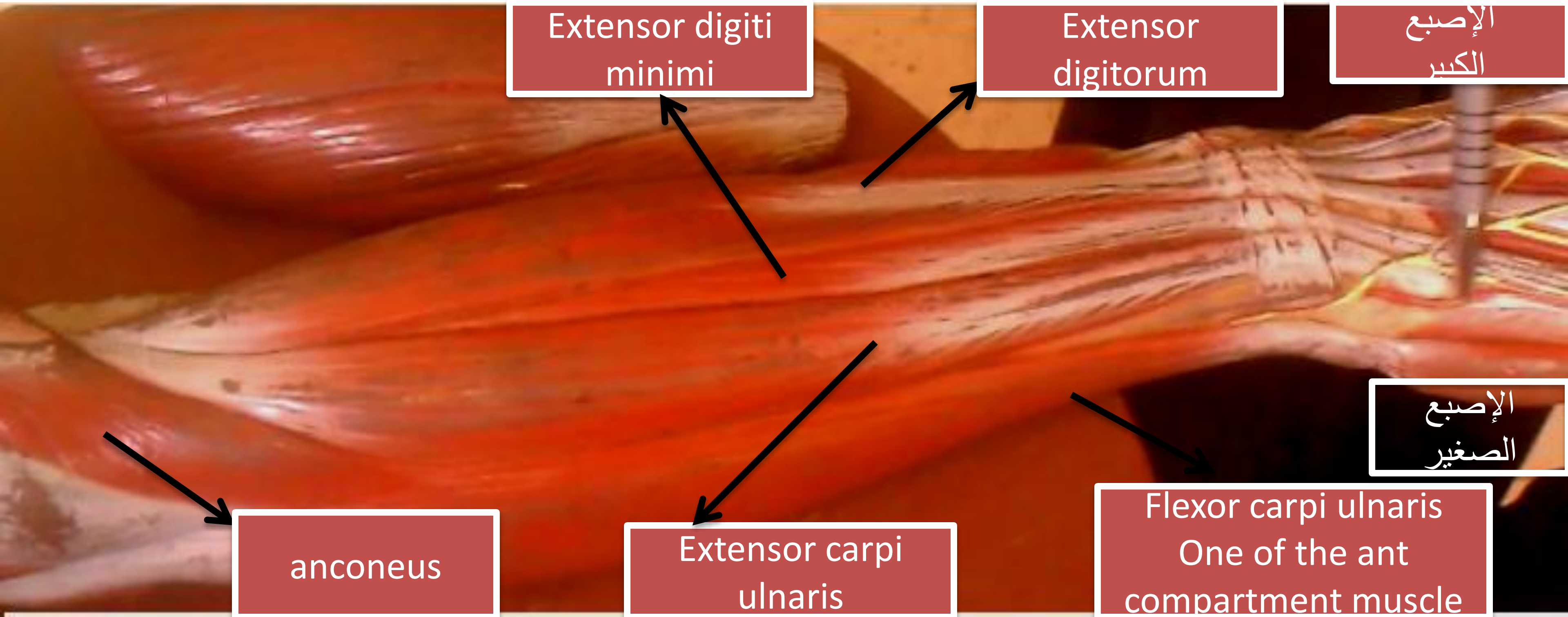
All of them supply by posterior interosseus nerve



Extensor carpi radialis brevis

Extensor carpi radialis longus

Brachioradialis muscle



Extensor digiti minimi

Extensor digitorum

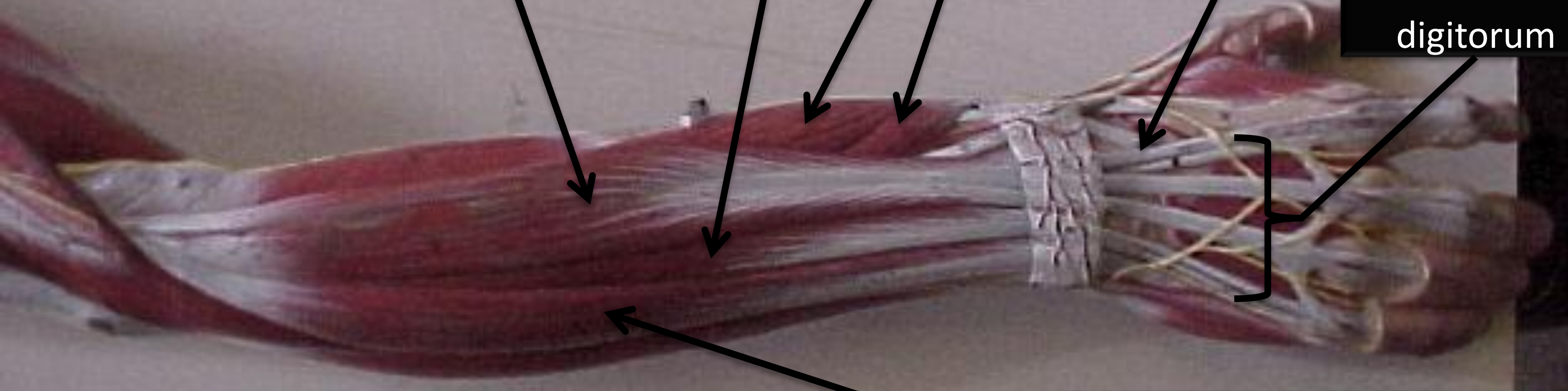
الإصبع الكبير

الإصبع الصغير

anconeus

Extensor carpi ulnaris

Flexor carpi ulnaris
One of the ant
compartment muscle



Extensor digitorum

Extensor digiti minimi

abductor pollicis longus

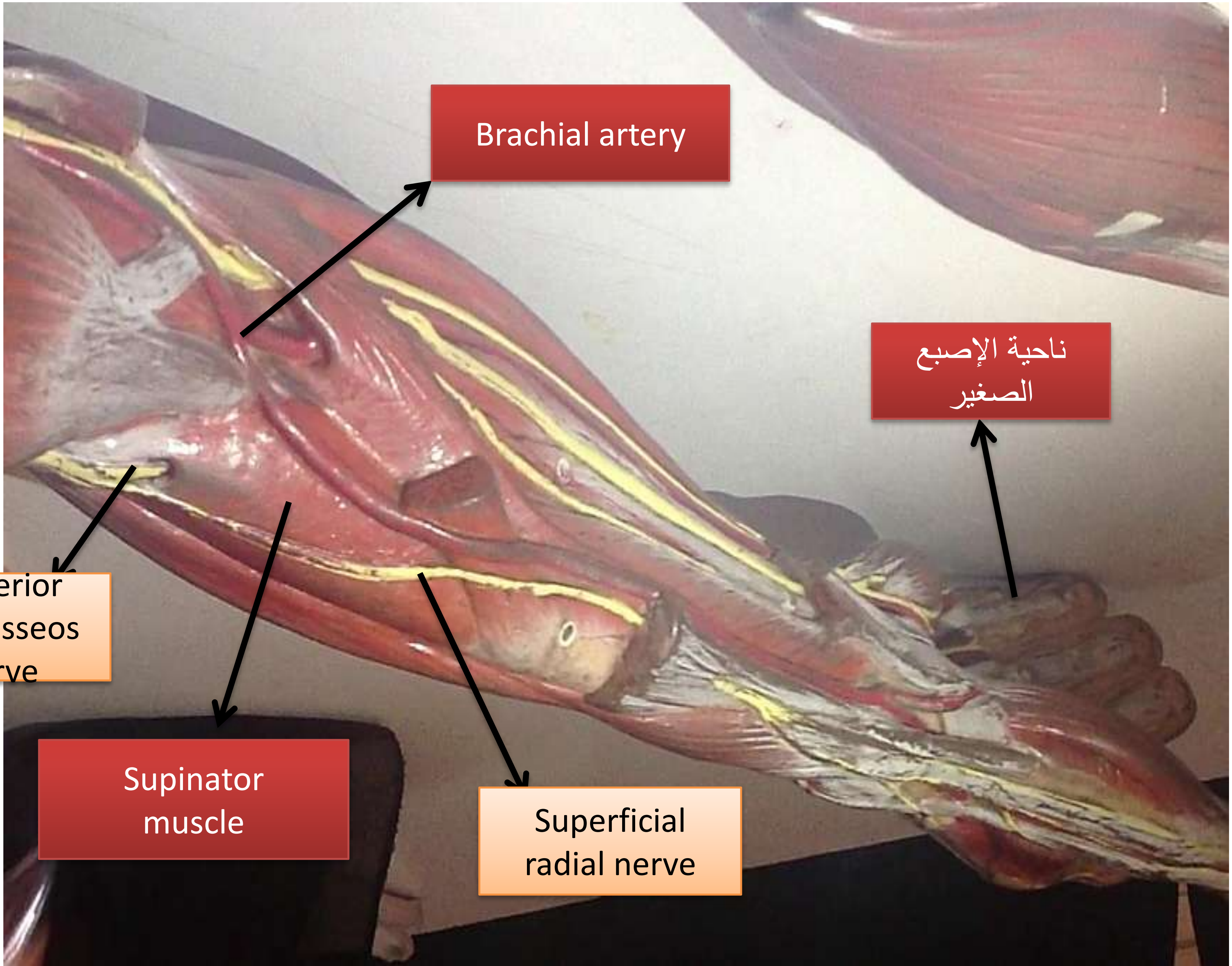
Extensor pol. brevis

Extensor indisis

Extensor digitorum

Extensor carbi ulnaris

We will know the supinator by the radial n.



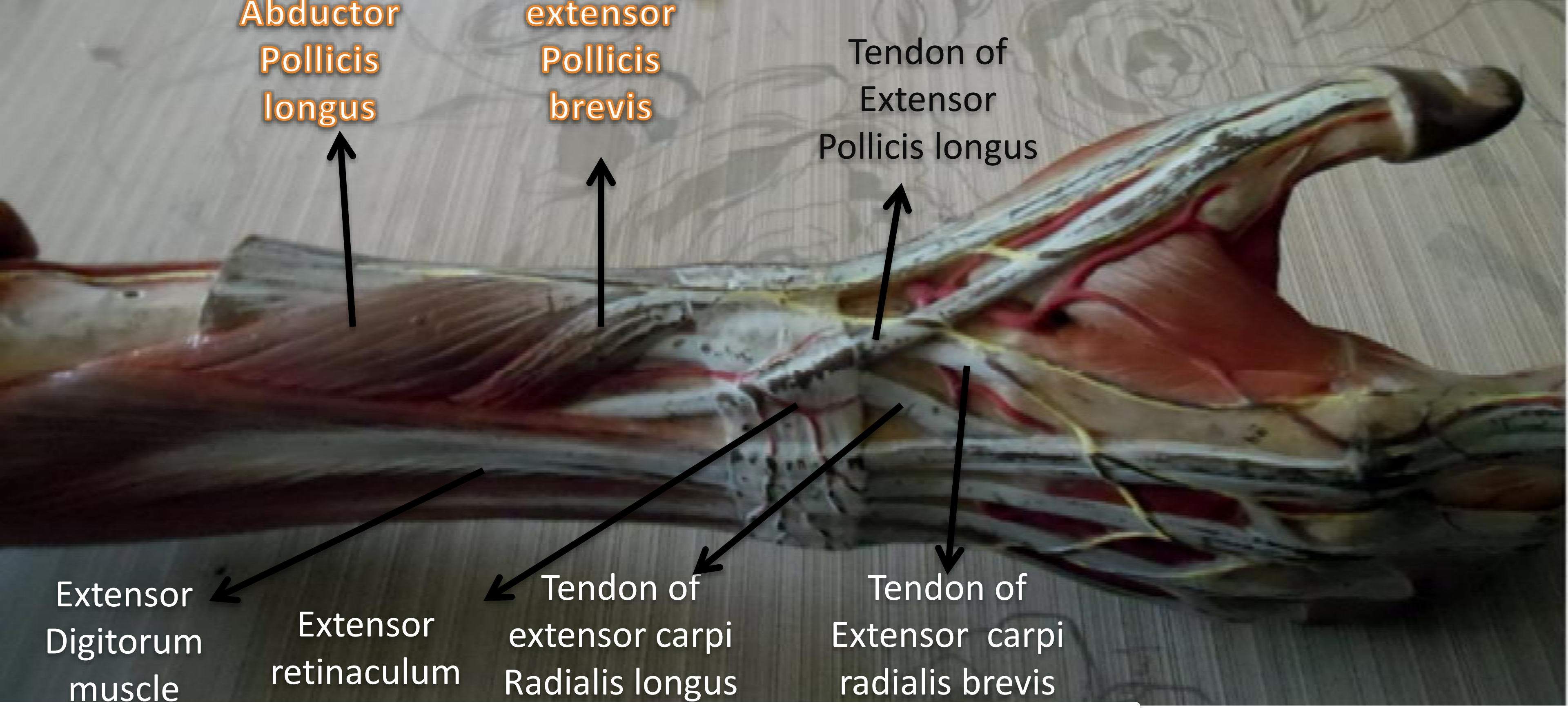
Brachial artery

ناحية الإصبع الصغير

Posterior interosseos nerve

Supinator muscle

Superficial radial nerve


Abductor Pollicis longus
extensor Pollicis brevis
Tendon of Extensor Pollicis longus
Extensor Digitorum muscle
Extensor retinaculum
Tendon of extensor carpi Radialis longus
Tendon of Extensor carpi radialis brevis

Anatomical snuff box :

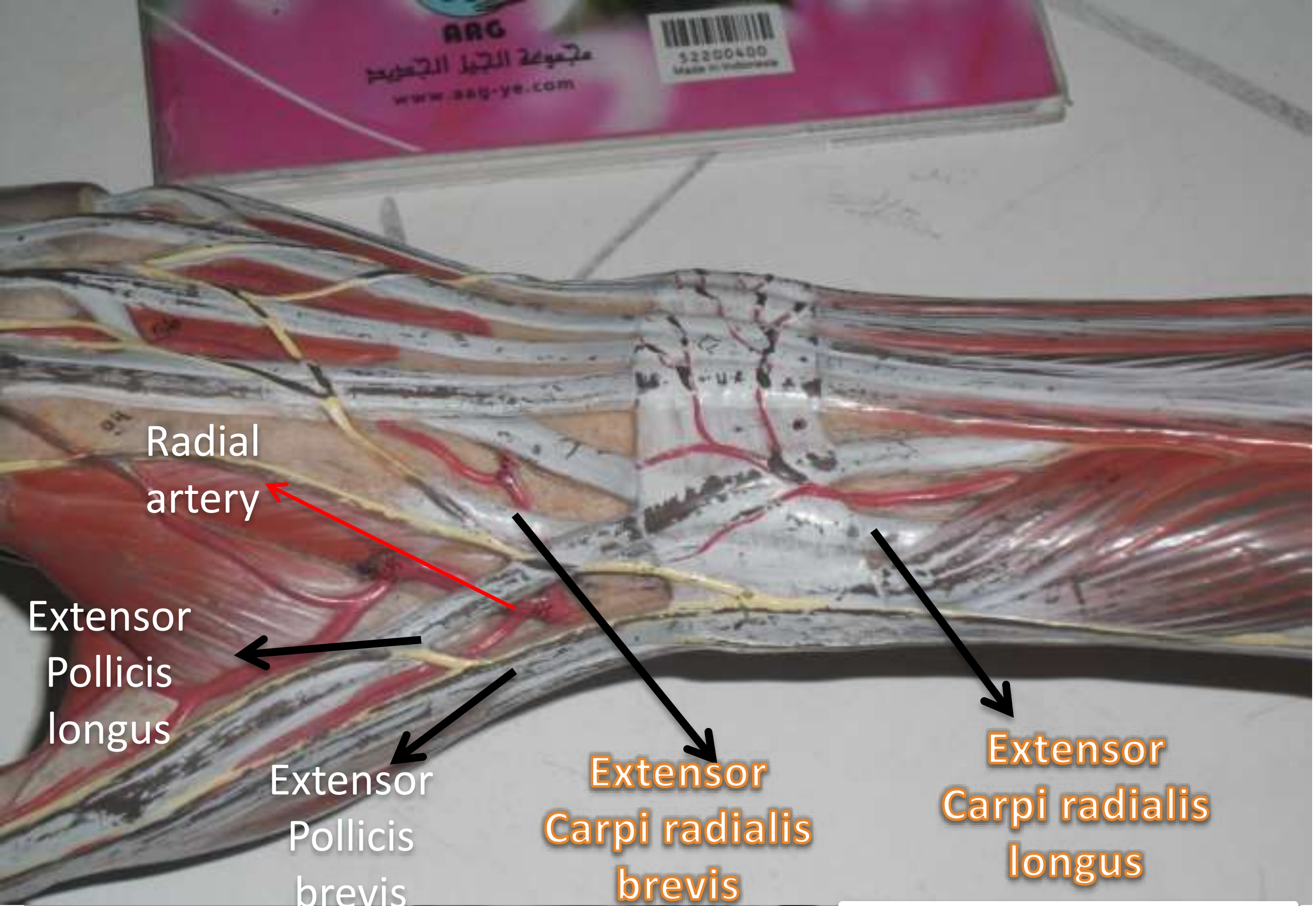
Boundaries :

1)anterolaterally: the tendons of abd pollicis longus and ext pollicis brevis

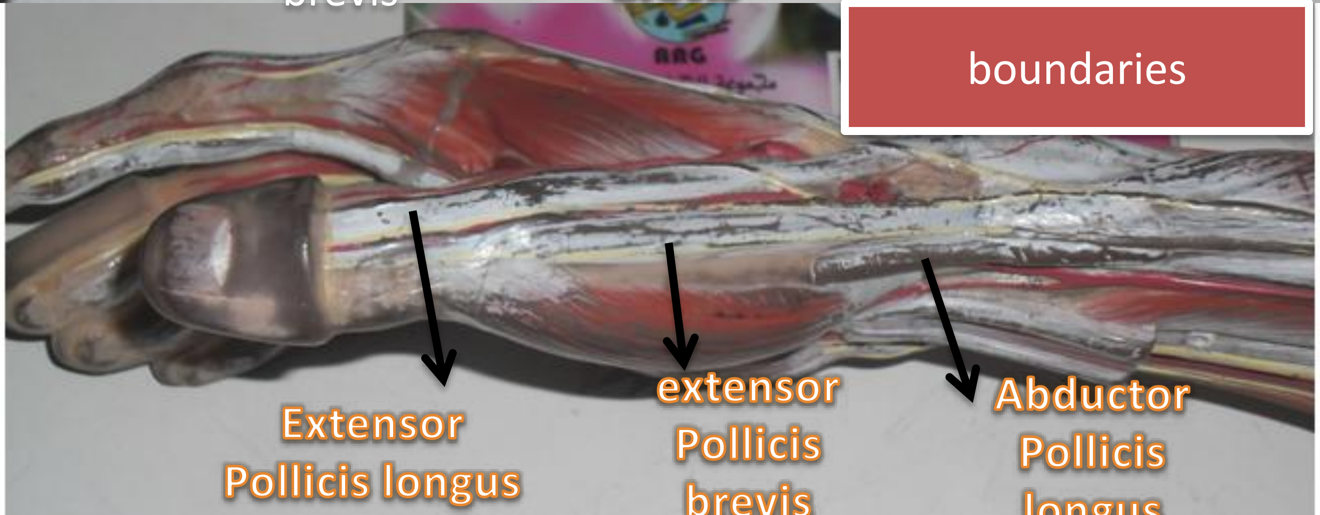
2)Postero medially: the tendon of the extensor pollicis longus

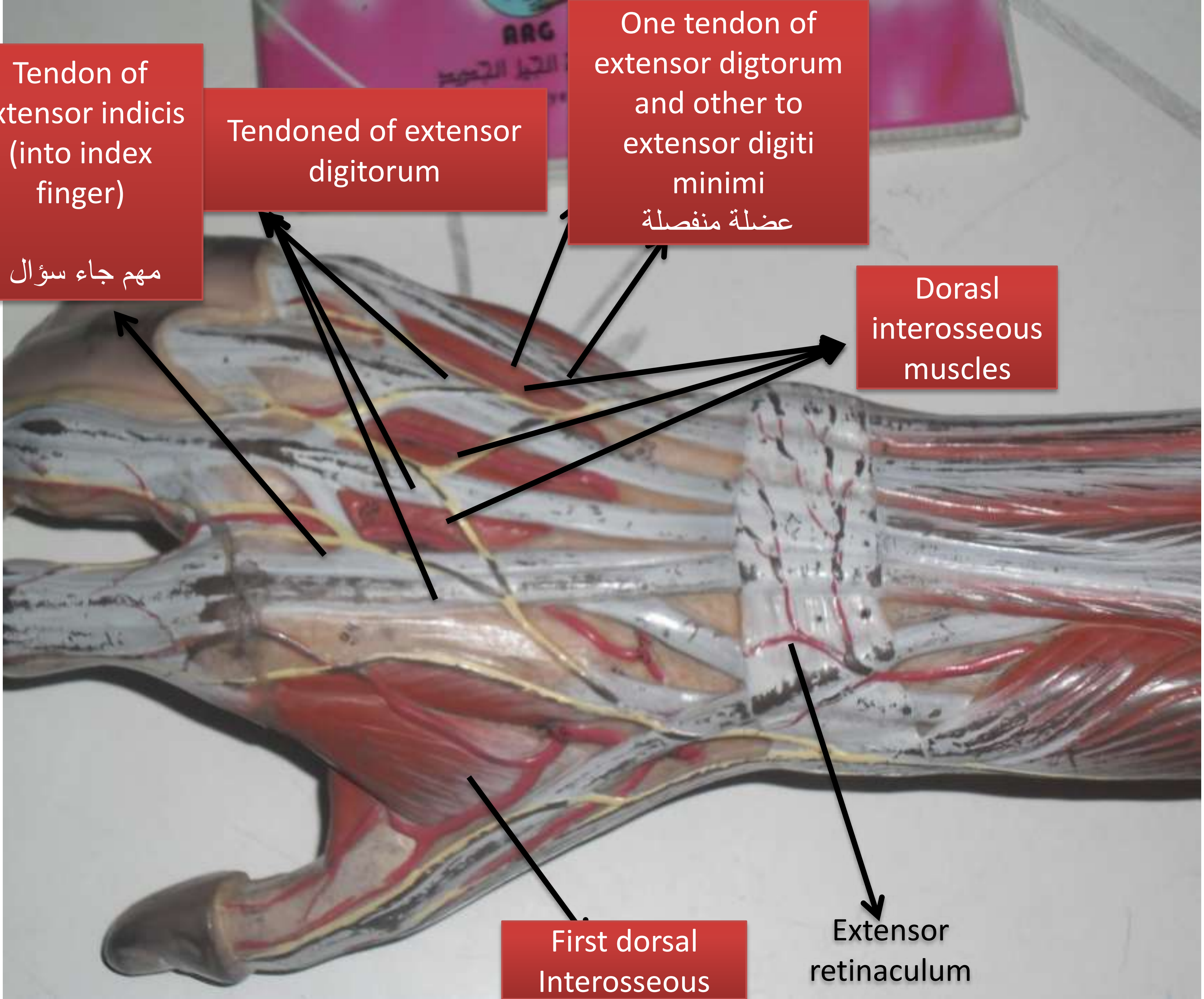
Contents:

1)Radial artery 2)the tendons of the ext carpi radialis longus and brevis muscles


Radial artery
Extensor Pollicis longus
Extensor Pollicis brevis
Extensor Carpi radialis brevis
Extensor Carpi radialis longus

boundaries


Extensor Pollicis longus
extensor Pollicis brevis
Abductor Pollicis longus



Tendon of extensor indicis (into index finger)

مهم جاء سؤال

Tendoned of extensor digitorum

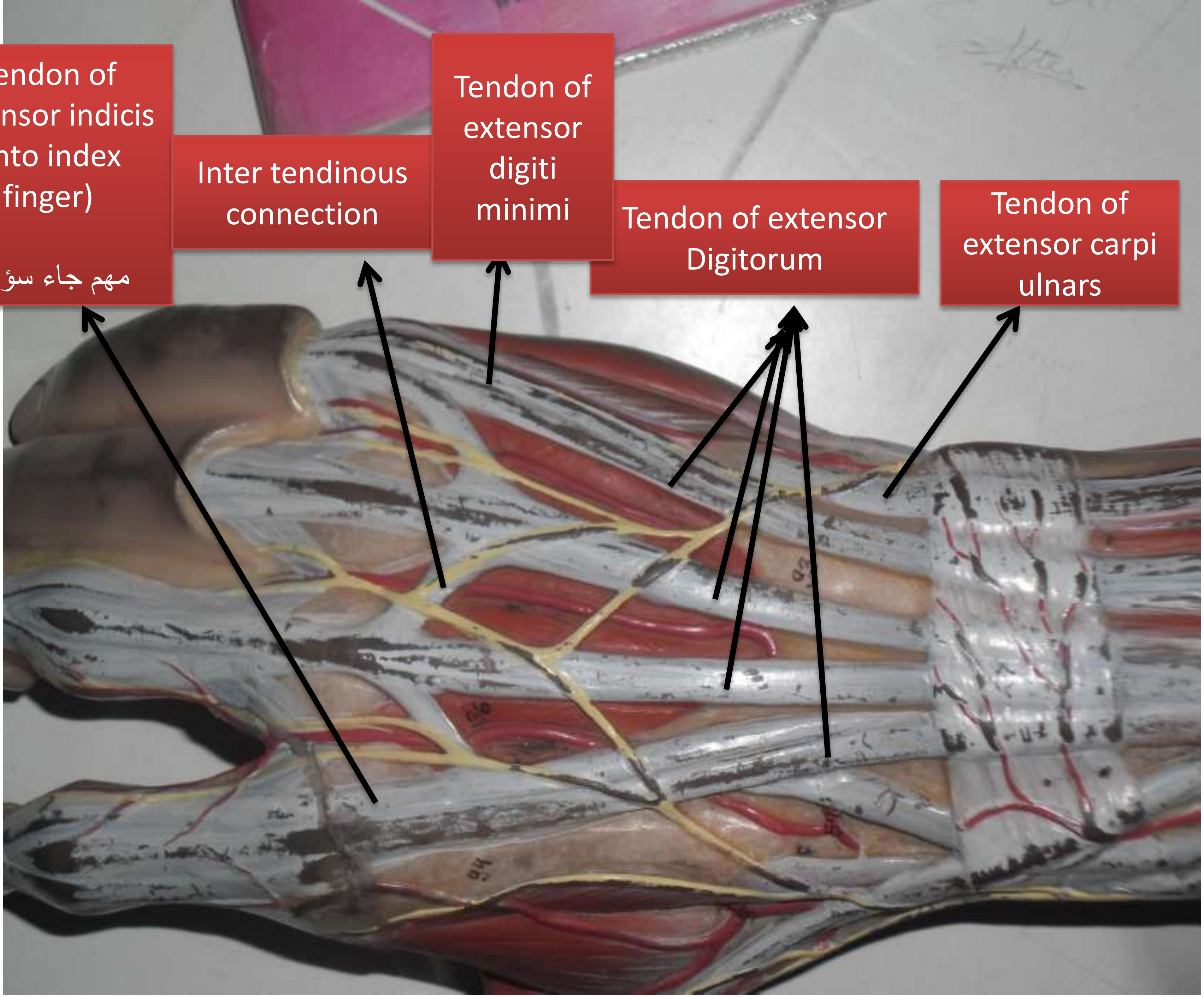
One tendon of extensor digtorum and other to extensor digiti minimi

عضلة منفصلة

Dorasl interosseous muscles

First dorsal Interosseous

Extensor retinaculum



Tendon of extensor indicis (into index finger)

مهم جاء سؤال

Inter tendinous connection

Tendon of extensor digiti minimi

Tendon of extensor Digitorum

Tendon of extensor carpi ulnars

Muscles of hand

MUSCLES OF LATERAL COMPARTMENT (4THENAR MUSCLES):

1)Adductor pollicis brevis

2)Flexor pollicis brevis

3)Opponens pollicis

4)Adductor pollicis

All of them supply by median nerve except adductor pollicis by ulnar nerve

MEDIAL COMPARTMENT :(3 HYPOTHENAR MUSCLES)

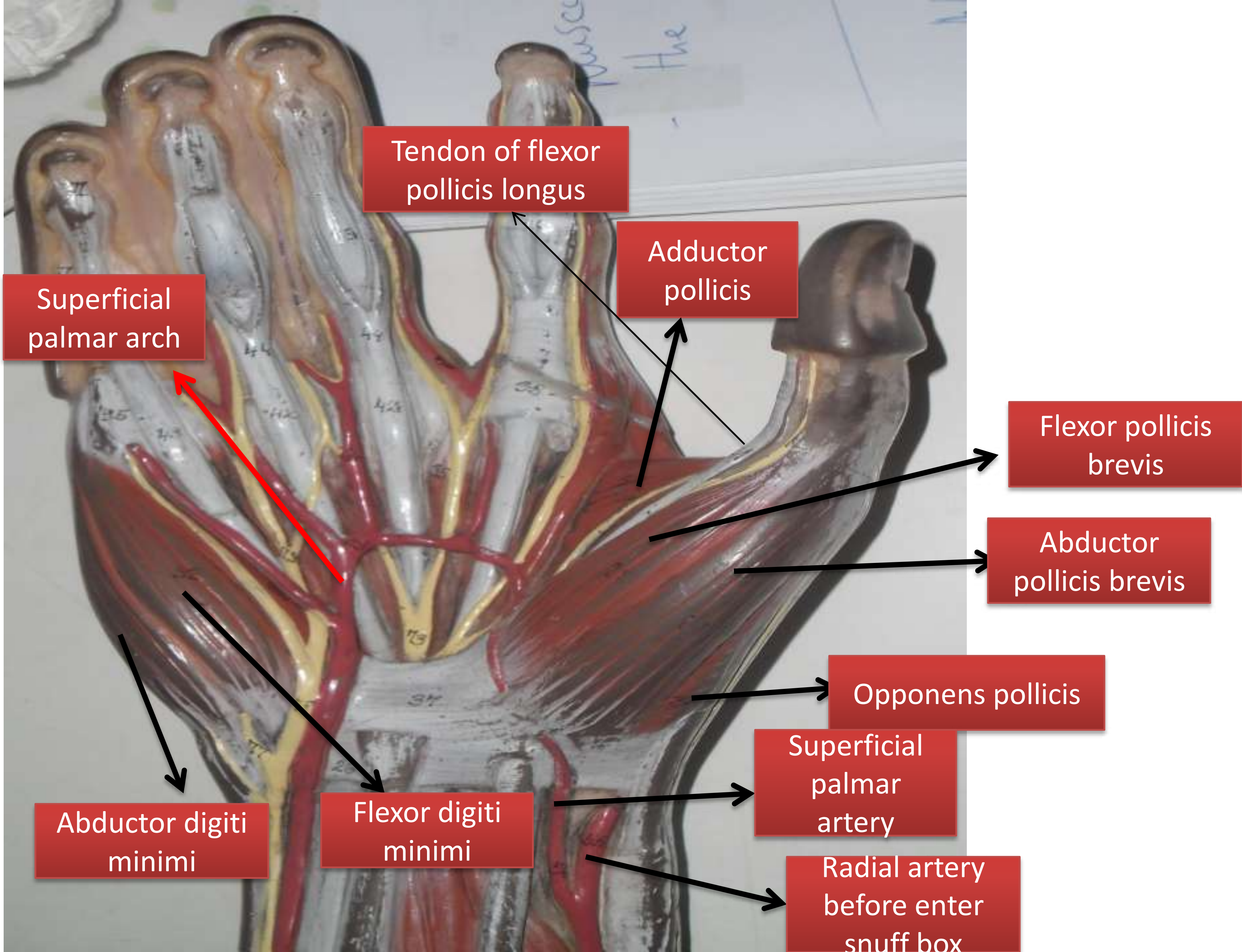
THE SAME OF LATERAL BUT INSTEAD OF POLLICIS WE CALLED DIGITI MINIMI

1)Abductor digiti minimi

2)Flexor digiti minimi

3)Opponens digiti minimi

All of them suppluy by ulnar nerve



Tendon of flexor pollicis longus

Adductor pollicis

Superficial palmar arch

Flexor pollicis brevis

Abductor pollicis brevis

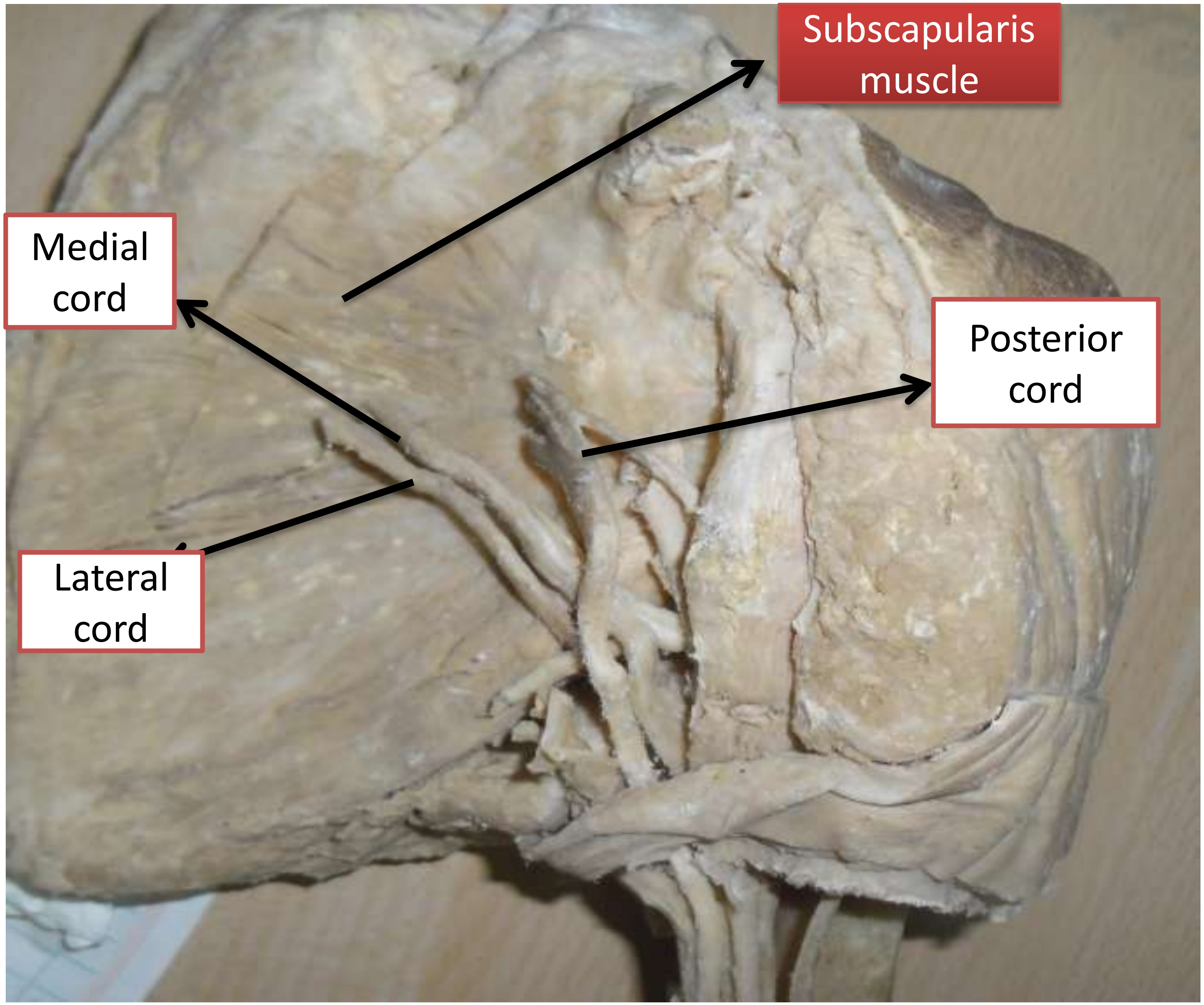
Opponens pollicis

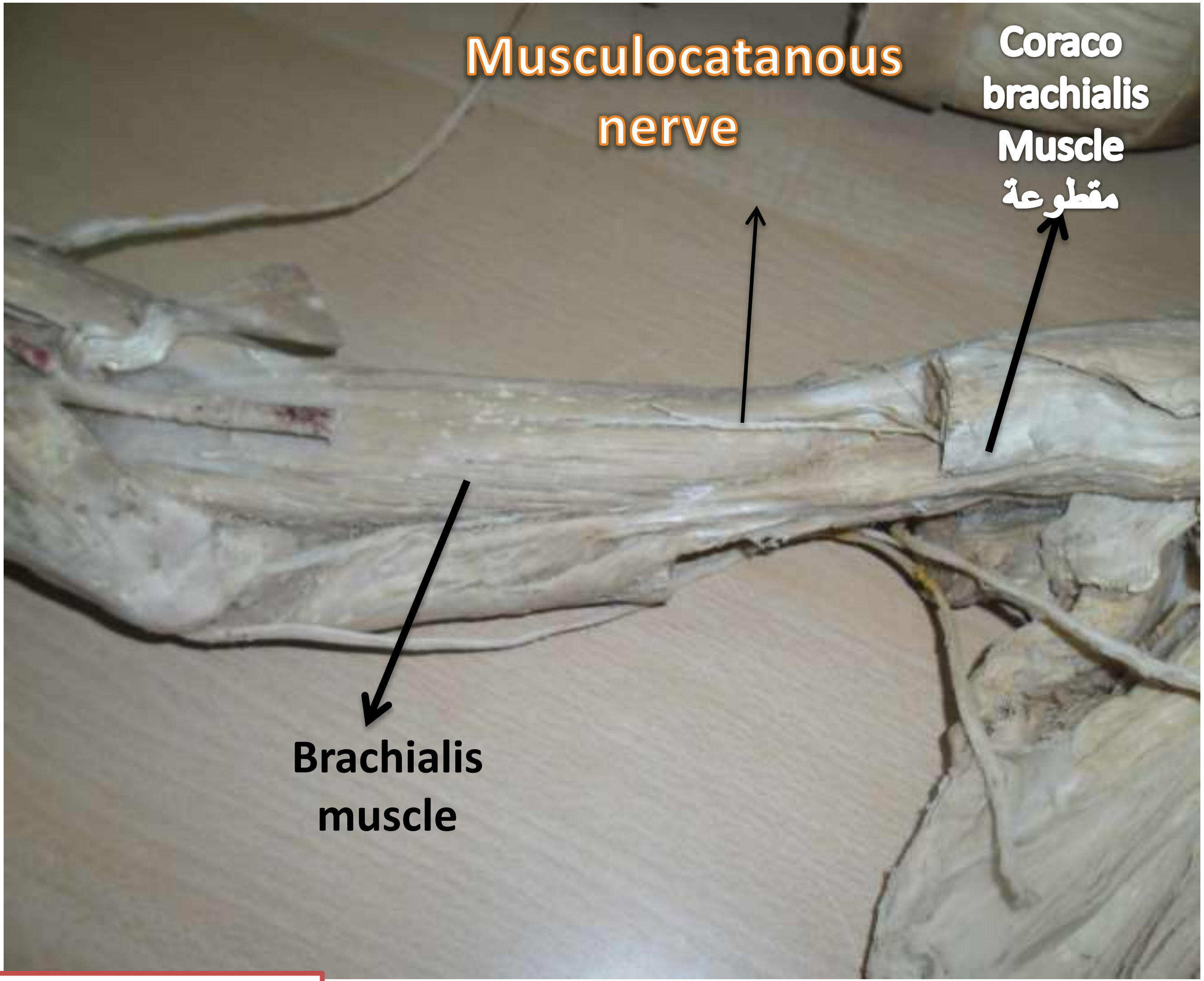
Superficial palmar artery

Abductor digiti minimi

Flexor digiti minimi

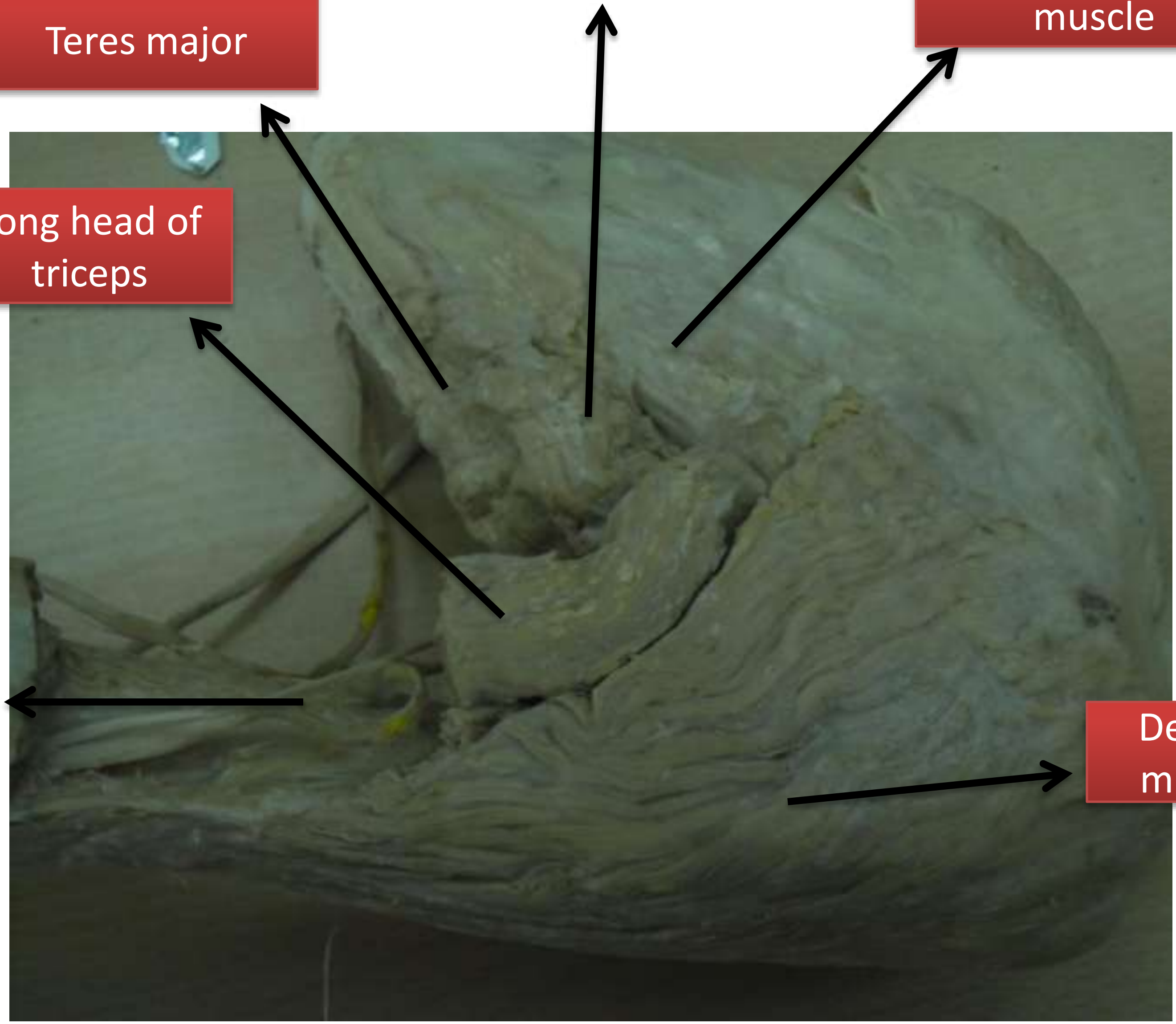
Radial artery before enter snuff box


Subscapularis muscle
Medial cord
Posterior cord
Lateral cord


Musculocatanous nerve
Coraco brachialis Muscle مقطوعة
Brachialis muscle

جاء هذا
العصب
سؤال

Front of the arm



Teres minor

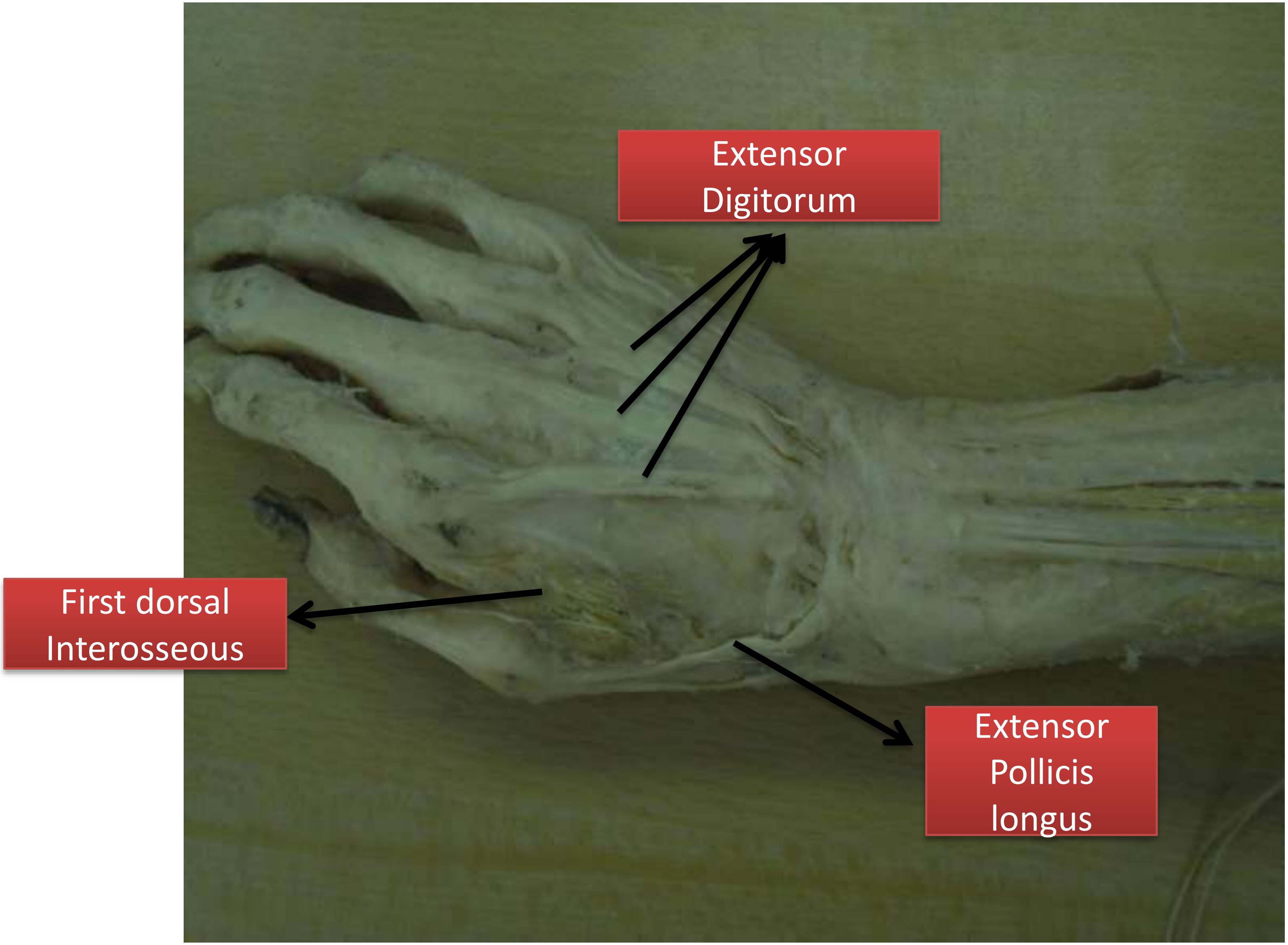
Infra spinatius muscle

Teres major

Long head of triceps

Radial nerve In spiral grove

Deltoid muscle

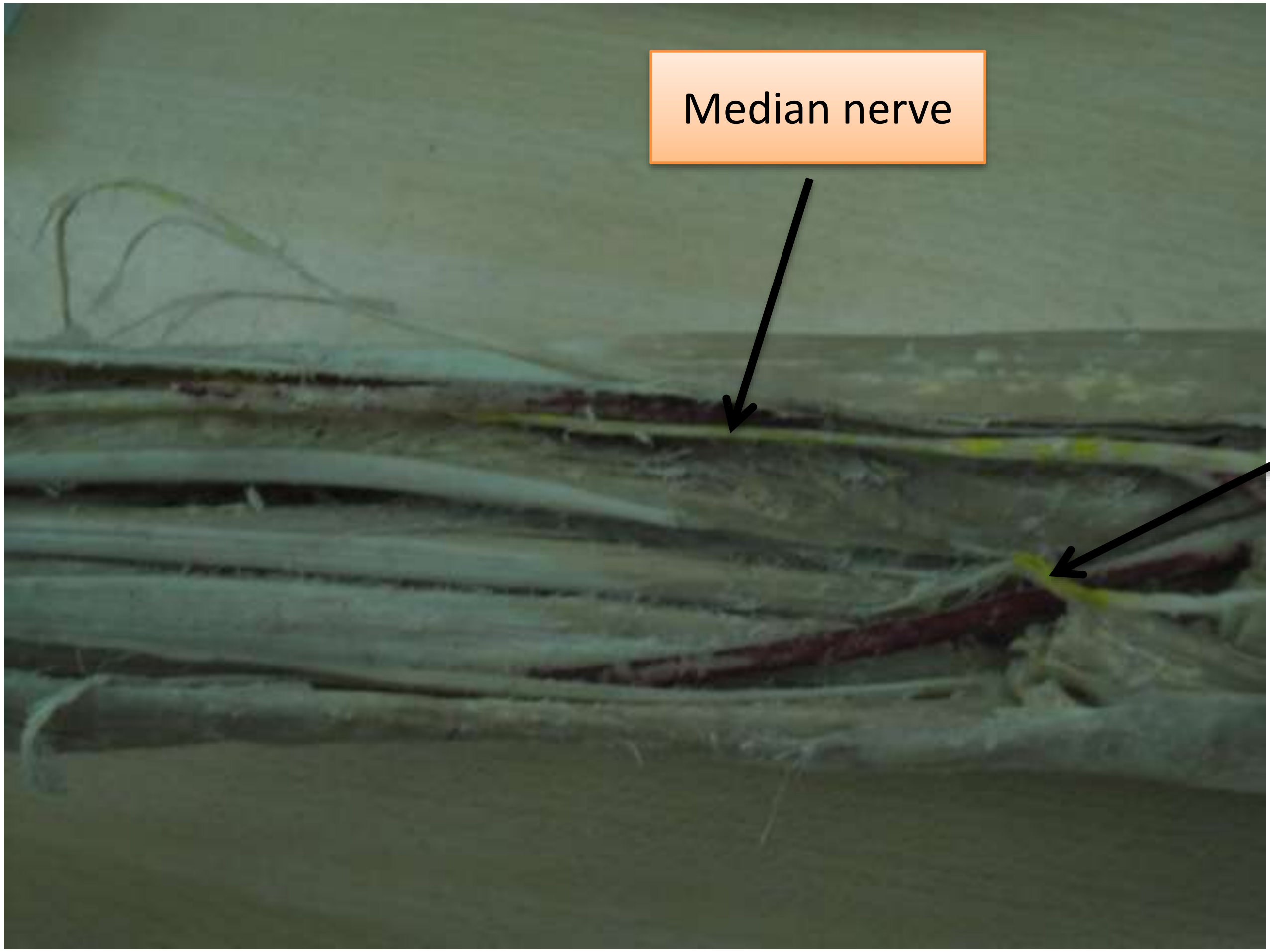


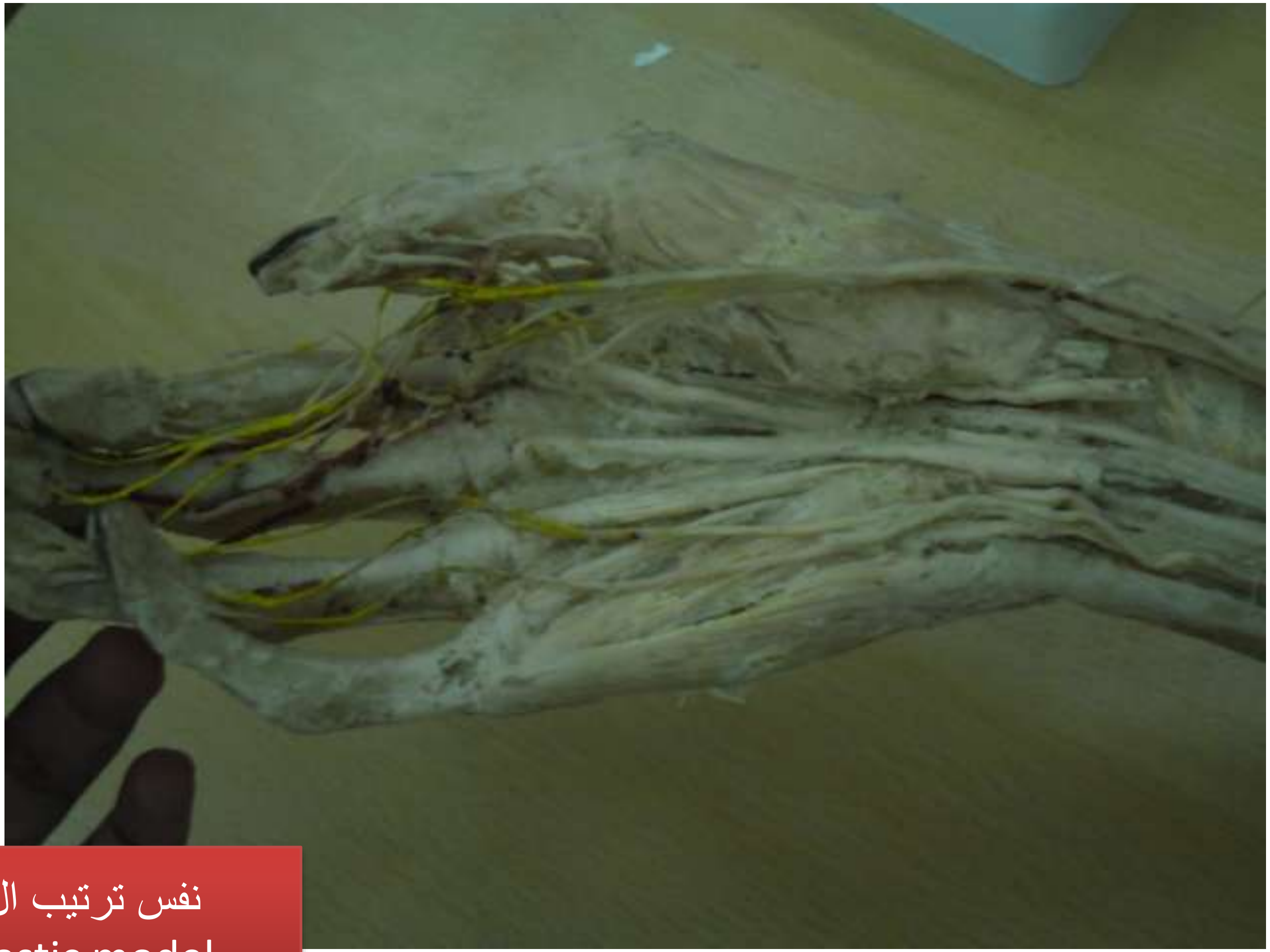
Extensor Digitorum

First dorsal Interosseous

Extensor Pollicis longus

Front of the for arm


Median nerve
Interossus Nerve from the median nerve



نفس ترتيب ال
Plastic model

HEAD & NECK

CERVICAL VERTEBRA

TYPES OF CERVICAL VERTEBRA

TYPICAL

(3-4-5-6)

NON –TYPICAL

FIRST: ATLAS

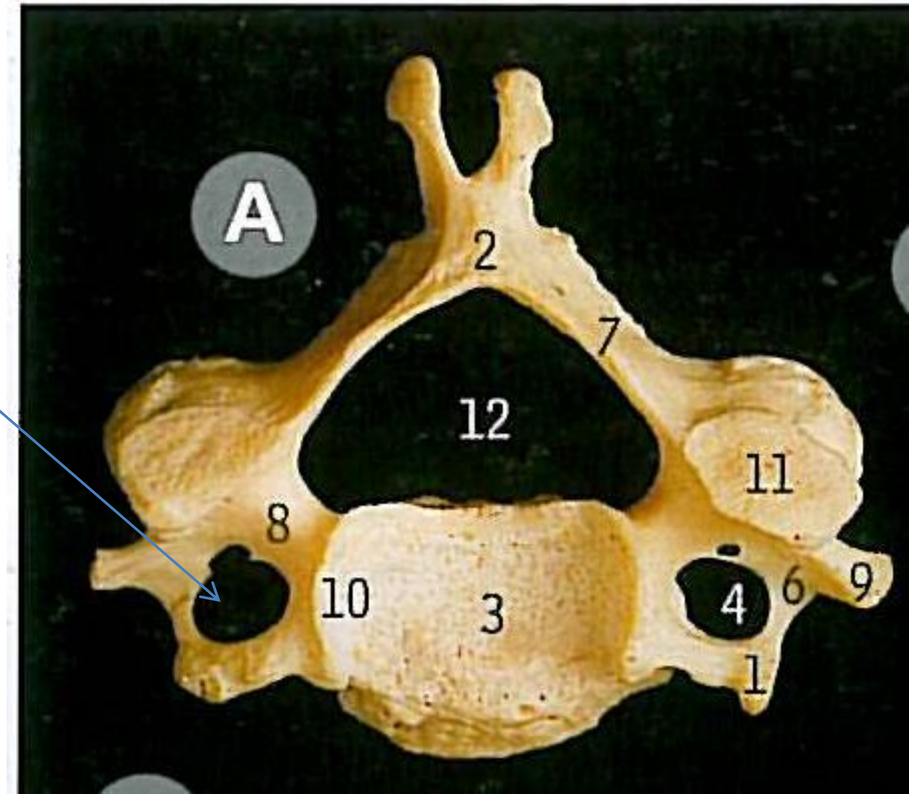
SECOND: AXIS

SEVENTH: PROMINENS

THE MAIN CHARACTERES

ARE ONLY VERTEBRA HAVE FORAMEN TRANSVERSARIUM IN THE TRANSVERES PROCESSES

(TYPICAL VERTEBRA)

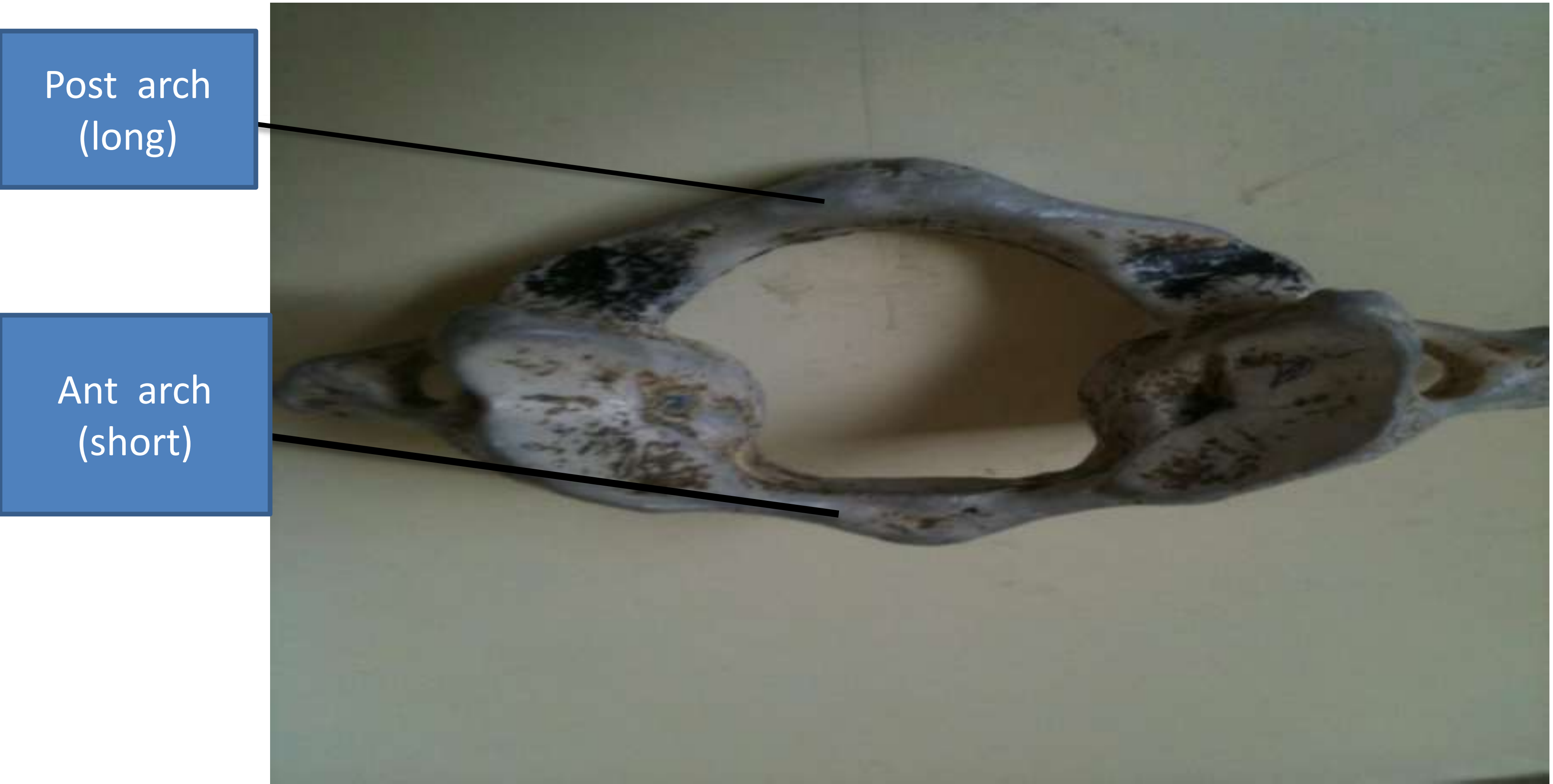

A
2
7
12
11
8
10
3
4
6
9
1

THE NON TYPICAL VERTEBRA

THE FIRST (ATLAS):

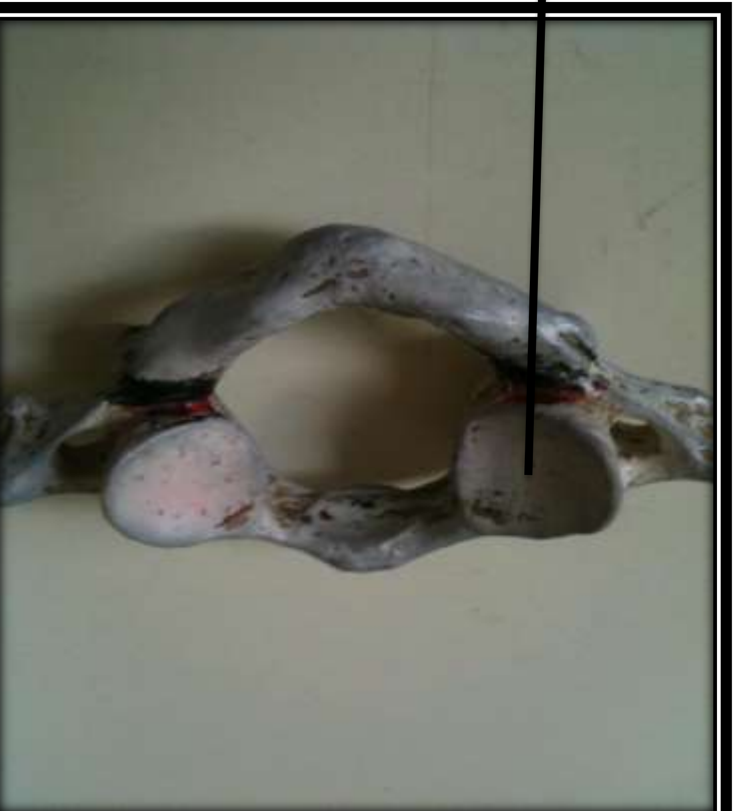
NO spine

NO body


Post arch
(long)
Ant arch
(short)

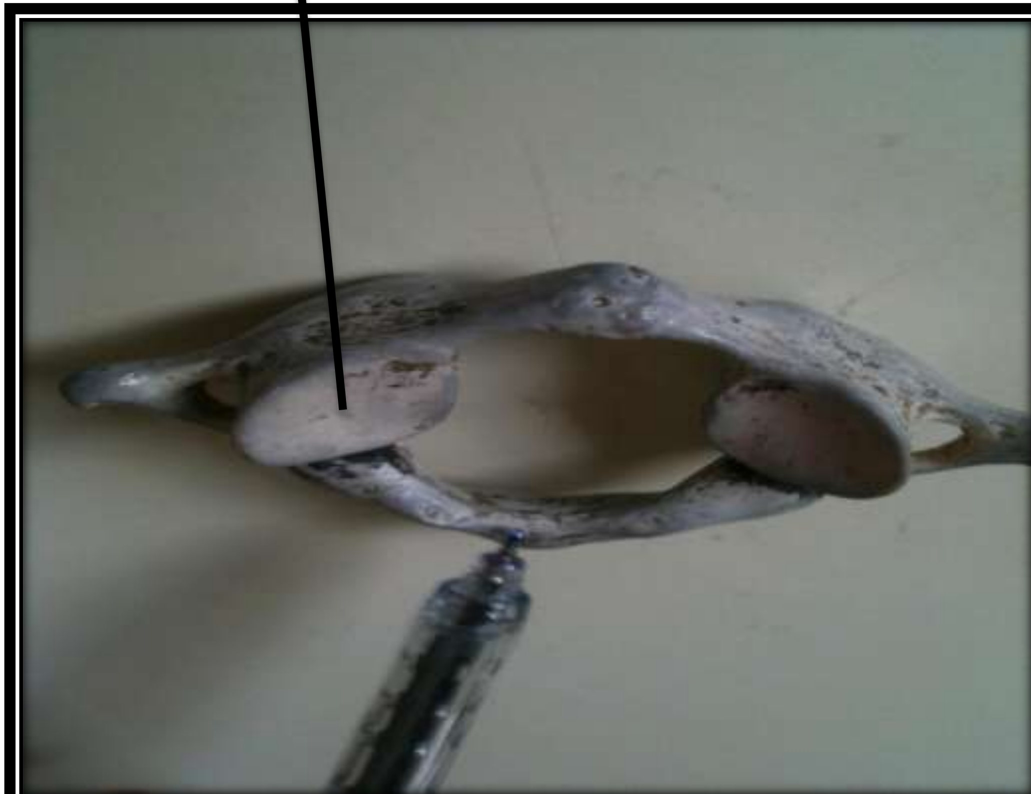
Inferior view

Inferior articulate facet

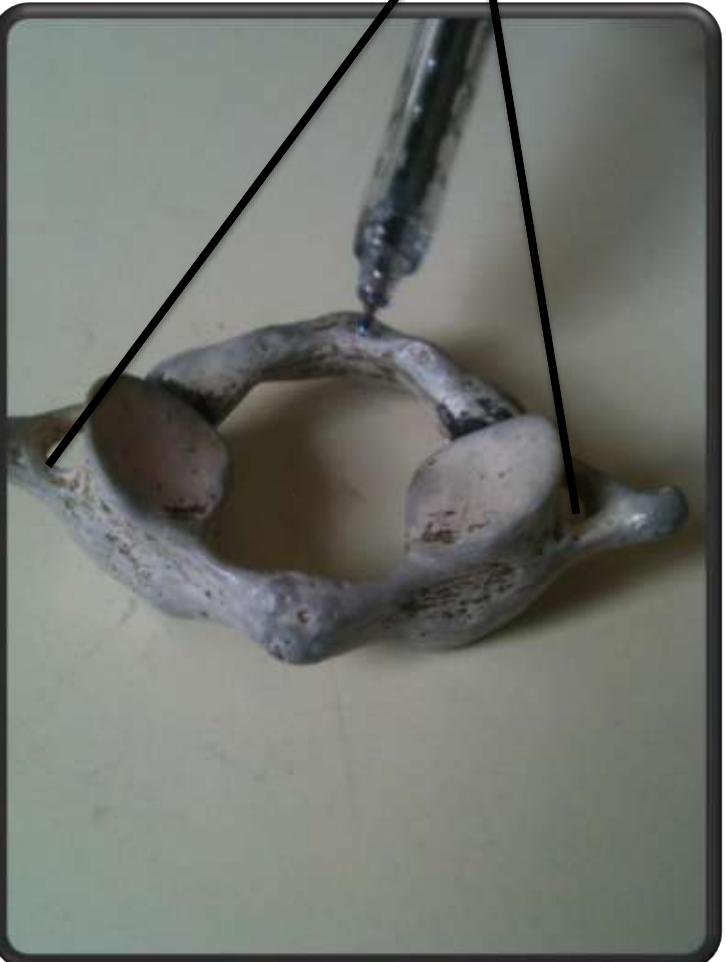


Superior view

Superior articulate facet



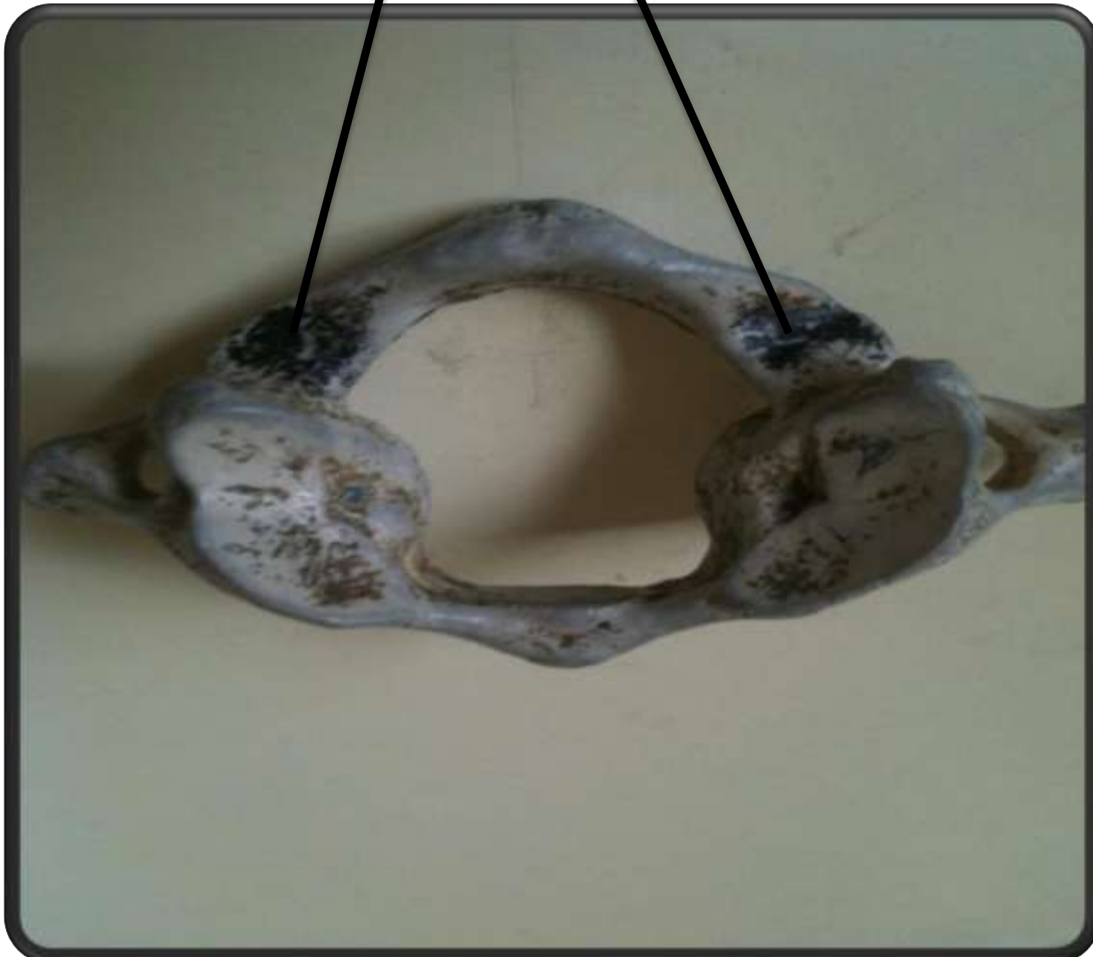
Transversarium foramen



There is groove in the upper surface of the post arch for:

1)Vertebral artery

2)Cervical (c1)nerve

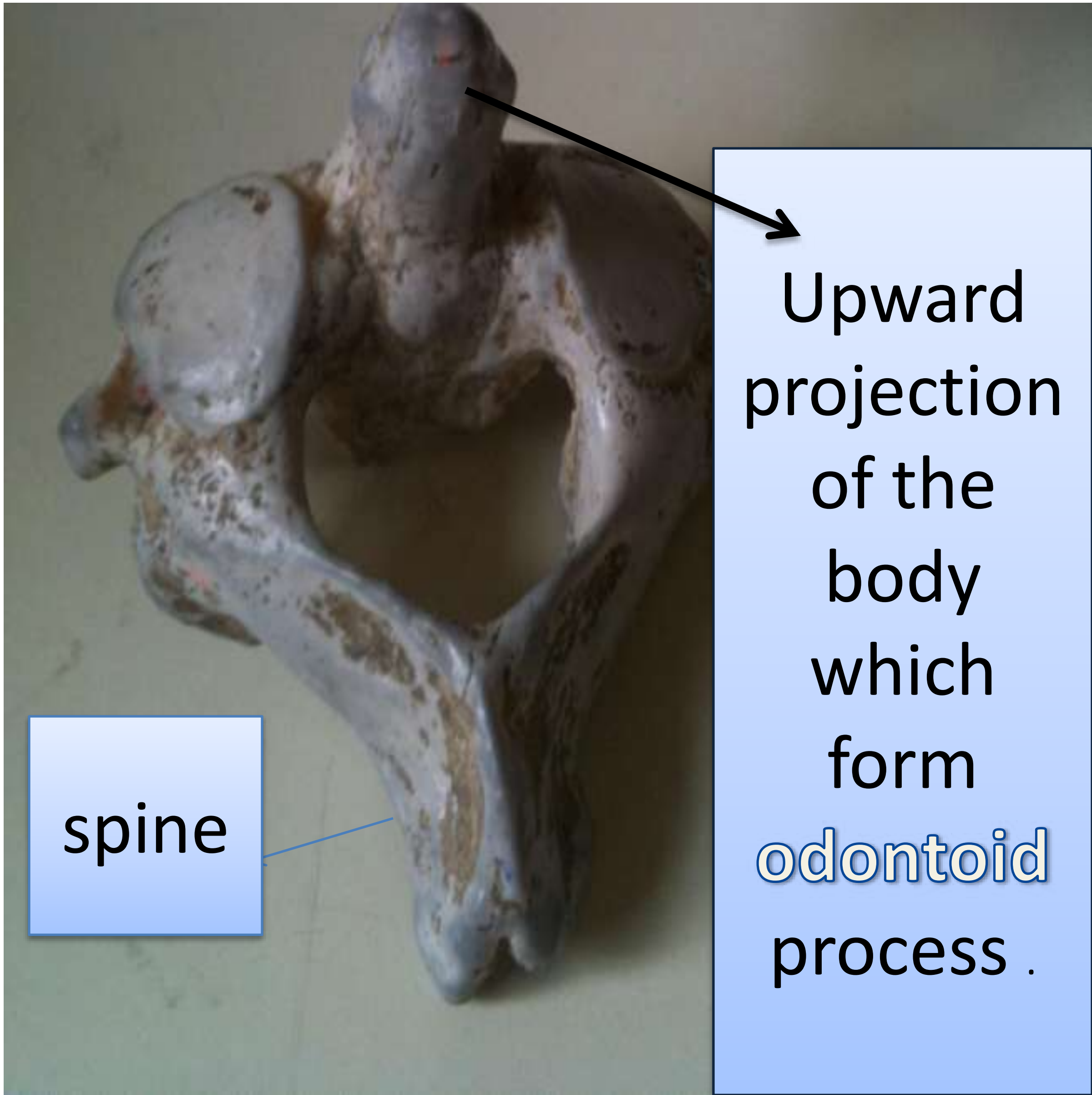


SECOND NON TYPICAL VERTEBRA:

(AXIS)

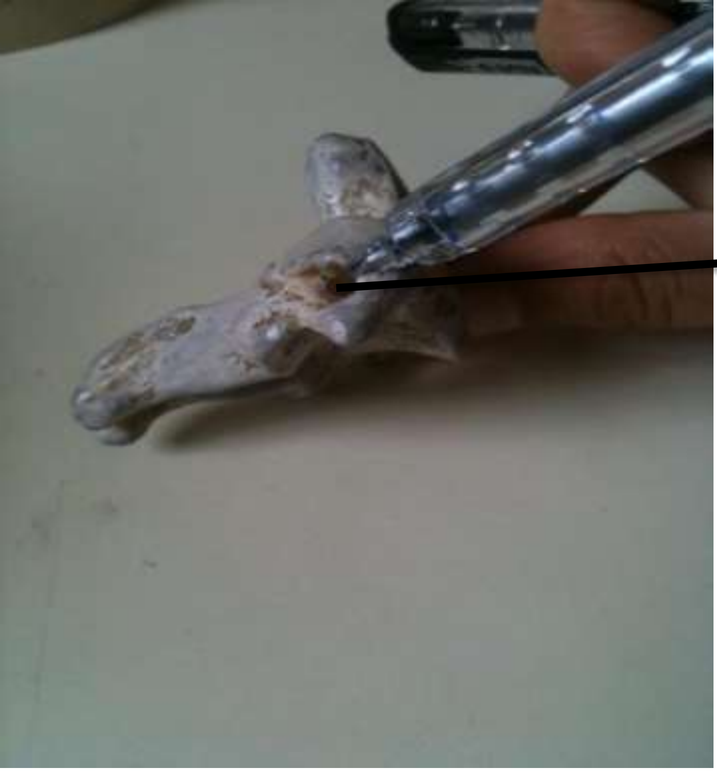
IT HAS:1- (BODY)

2- (SPINE)



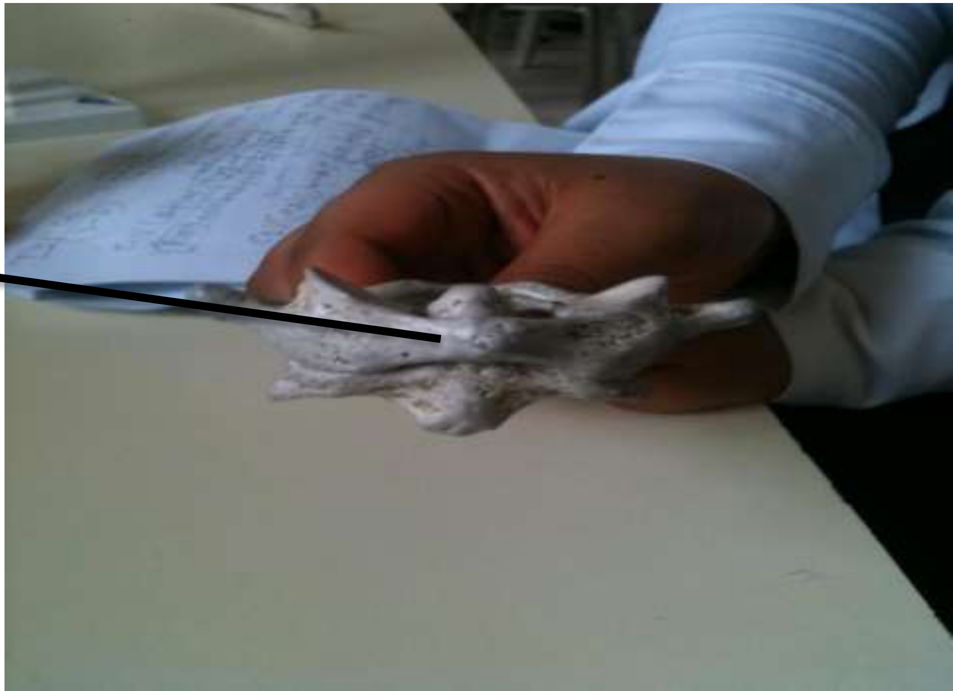
spine

Upward projection of the body which form **odontoid** process .



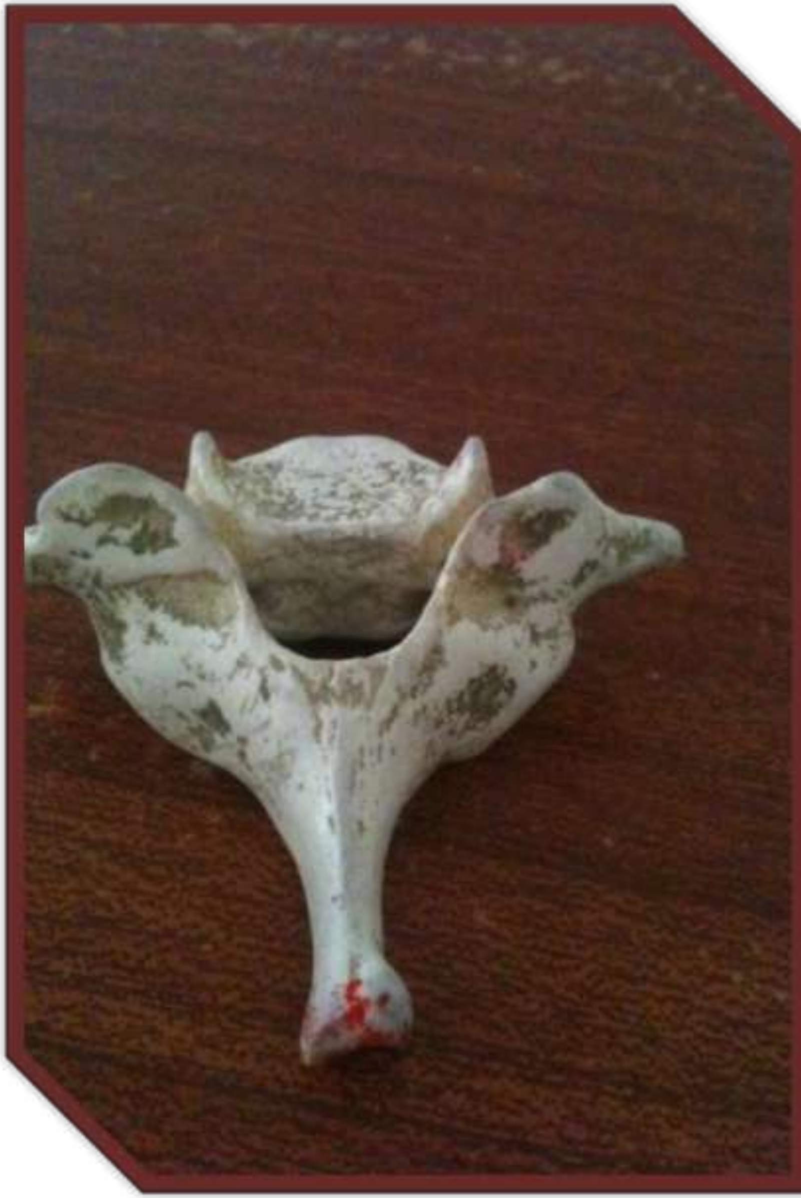
Transversarium foramen

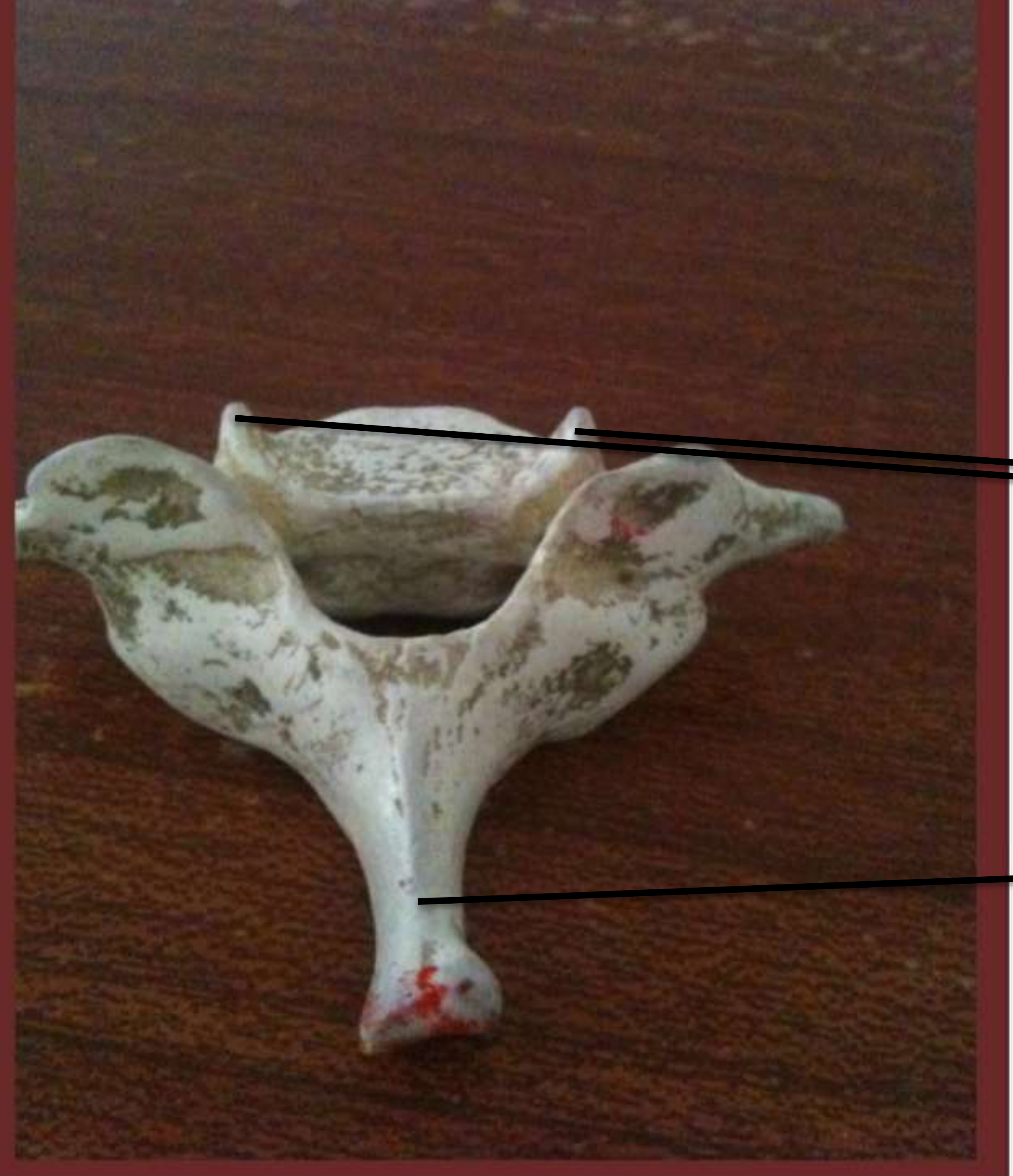
Articulation
between
Atlas and axis by
(atlanto axial joint)
Which allow the
movement of head



The vertebra prominens

- It has spine without bifid
- Also it is spine felt Subcutaneously at the back of neck
- The transversarium foramen small May be absent in on side and transmits Accessory vertebral vein.



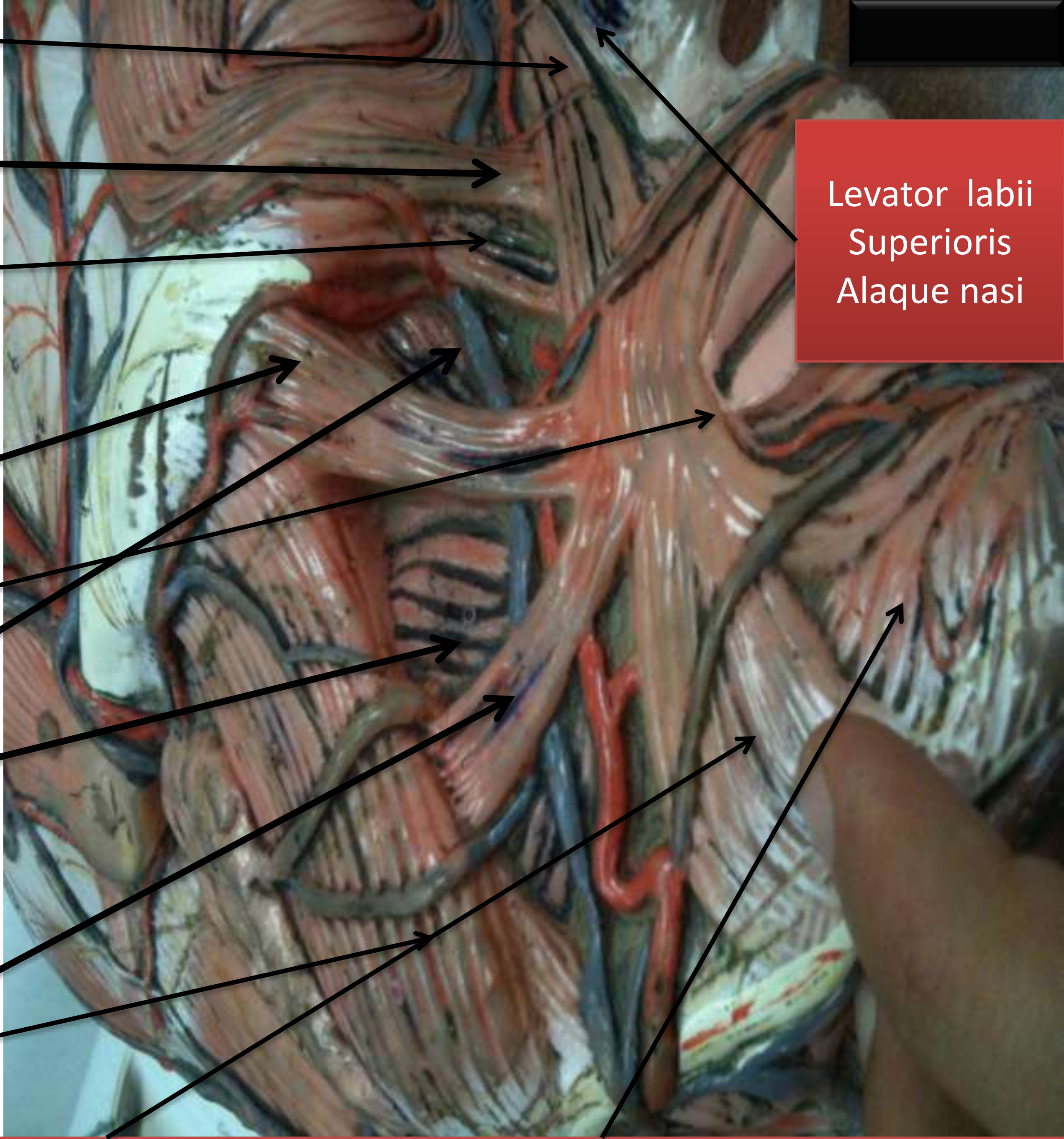


Posterior lateral lips

spine

ventro-basal
paracardiaque
POUMON
(vue
BRAIRIE
Segment caudal
Segment paracardiaque
Segment ventro-basal
POUMON GAUCHE
27, rue de l'Ecole de Médecine 75006 PARIS

Hyoid Bone



Levator labii Superioris

Zygomotic minor

Levator anguli oris

Levator labii Superioris Alaque nasi

Zygomatic major

Orbicularis oris

Buccinator

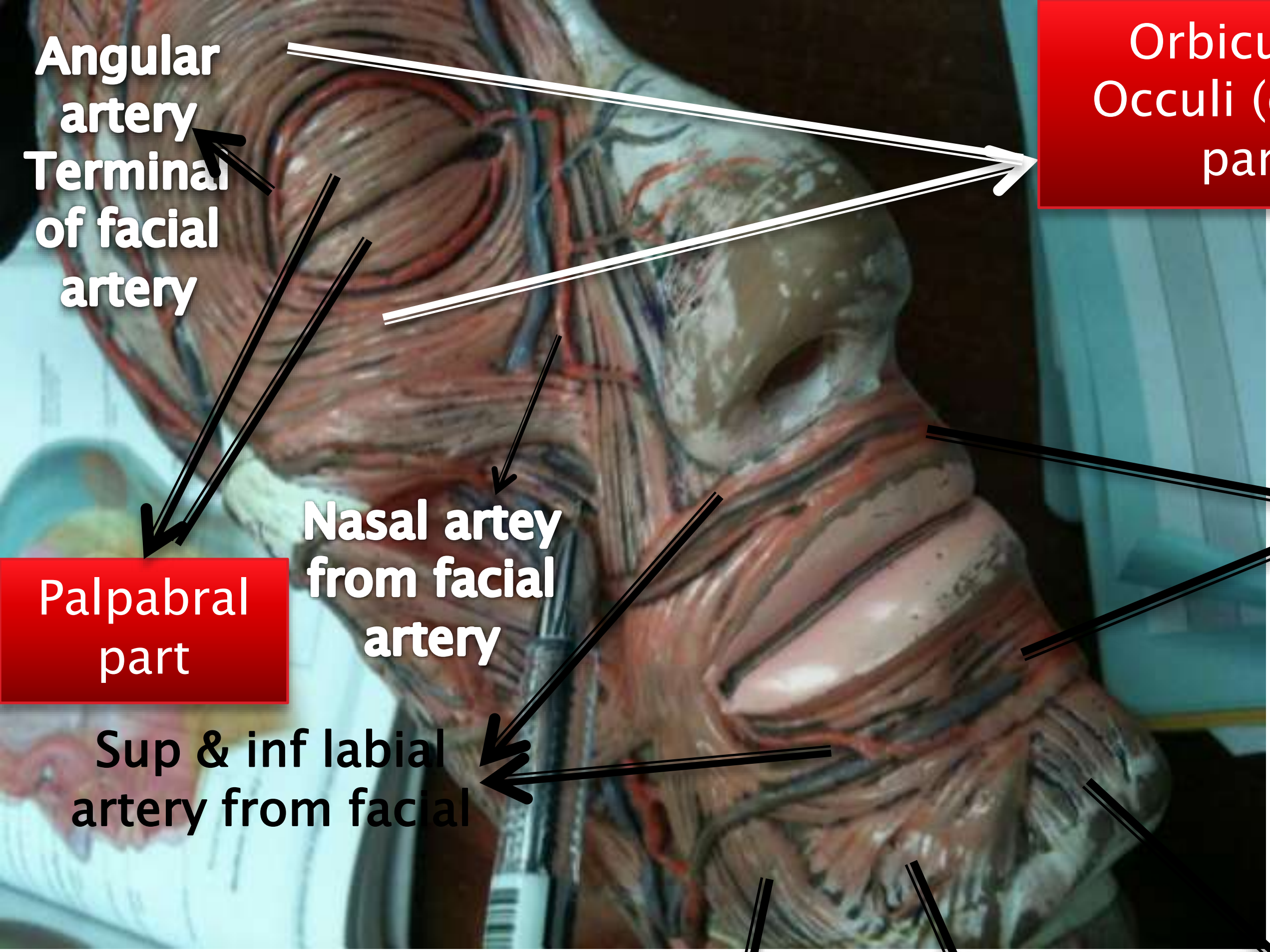
Risorius

Masseter (strongest muscle)

Depressor anguli oris

Depressor labii inferioris

mentalis



Angular artery

Terminal of facial artery

Orbicularis Occuli (orbital part)

Palpabral part

Nasal artey from facial artery

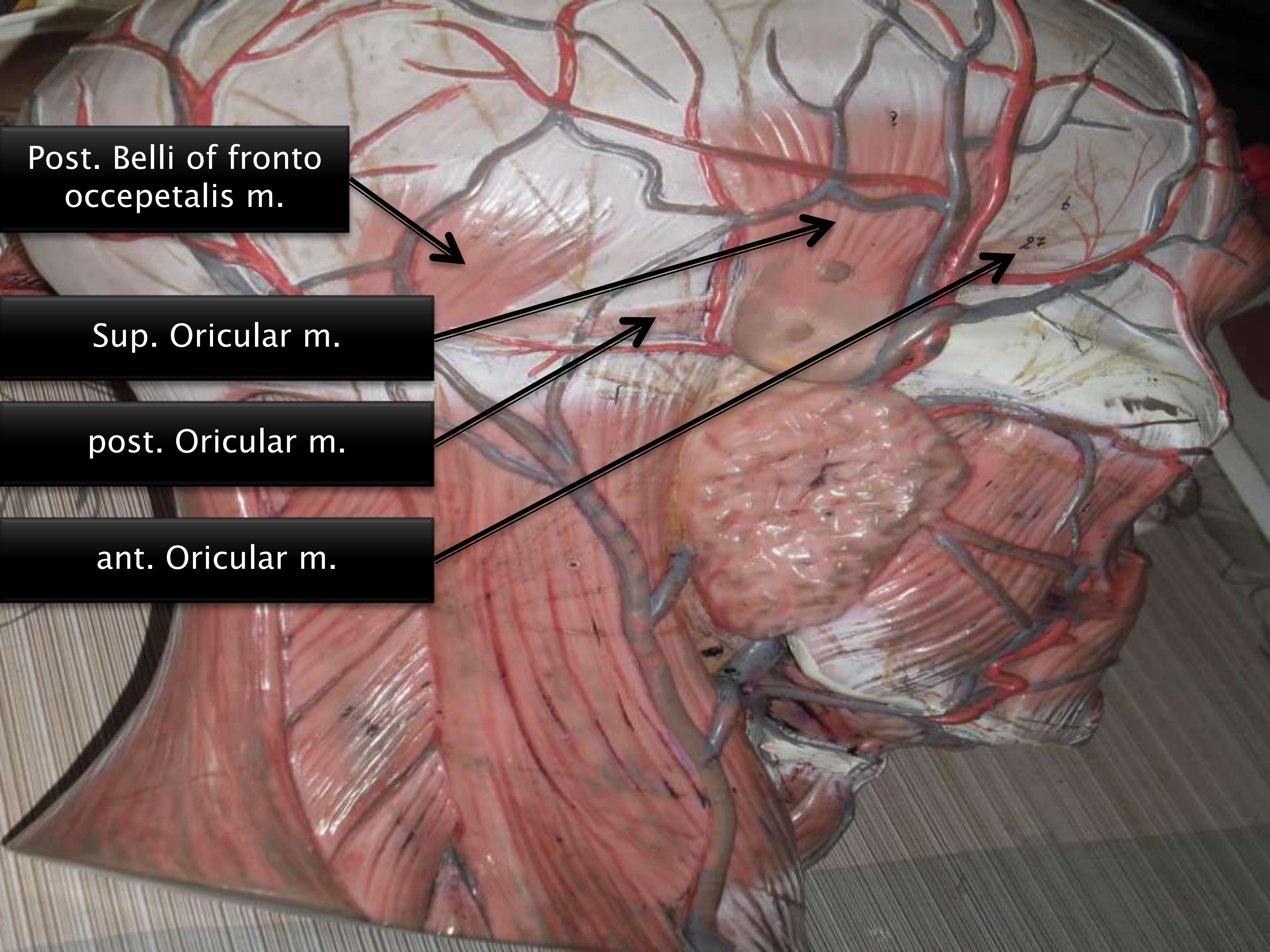
Orbicularis oris

Sup & inf labial artery from facial

Depressor labii inferioris

Depressor anguli oris

mentalis

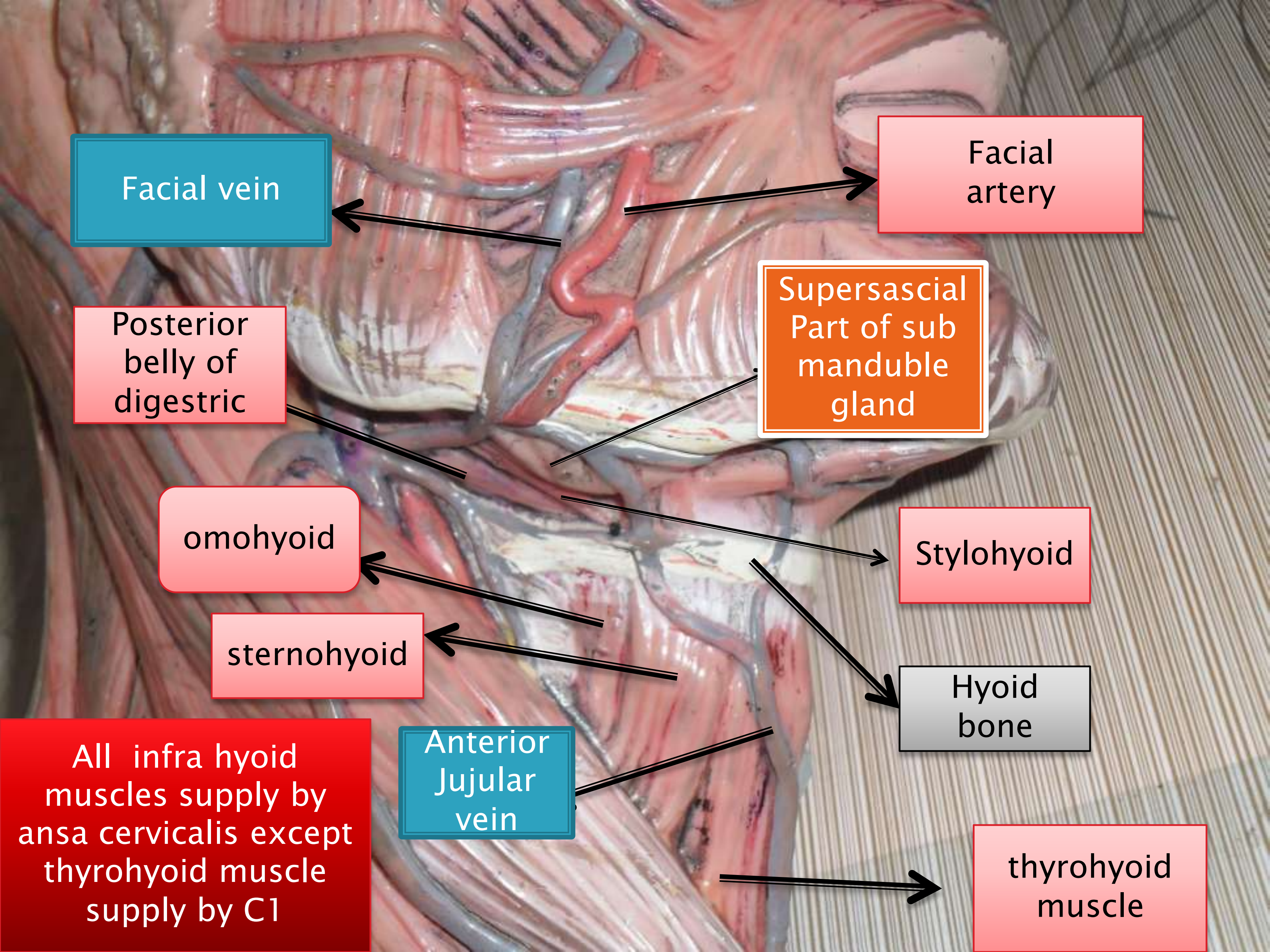


Post. Belli of fronto occepetalis m.

Sup. Oricular m.

post. Oricular m.

ant. Oricular m.



Facial vein

Facial artery

Posterior belly of digestric

Supersascial Part of sub mandubie gland

omohyoid

Stylohyoid

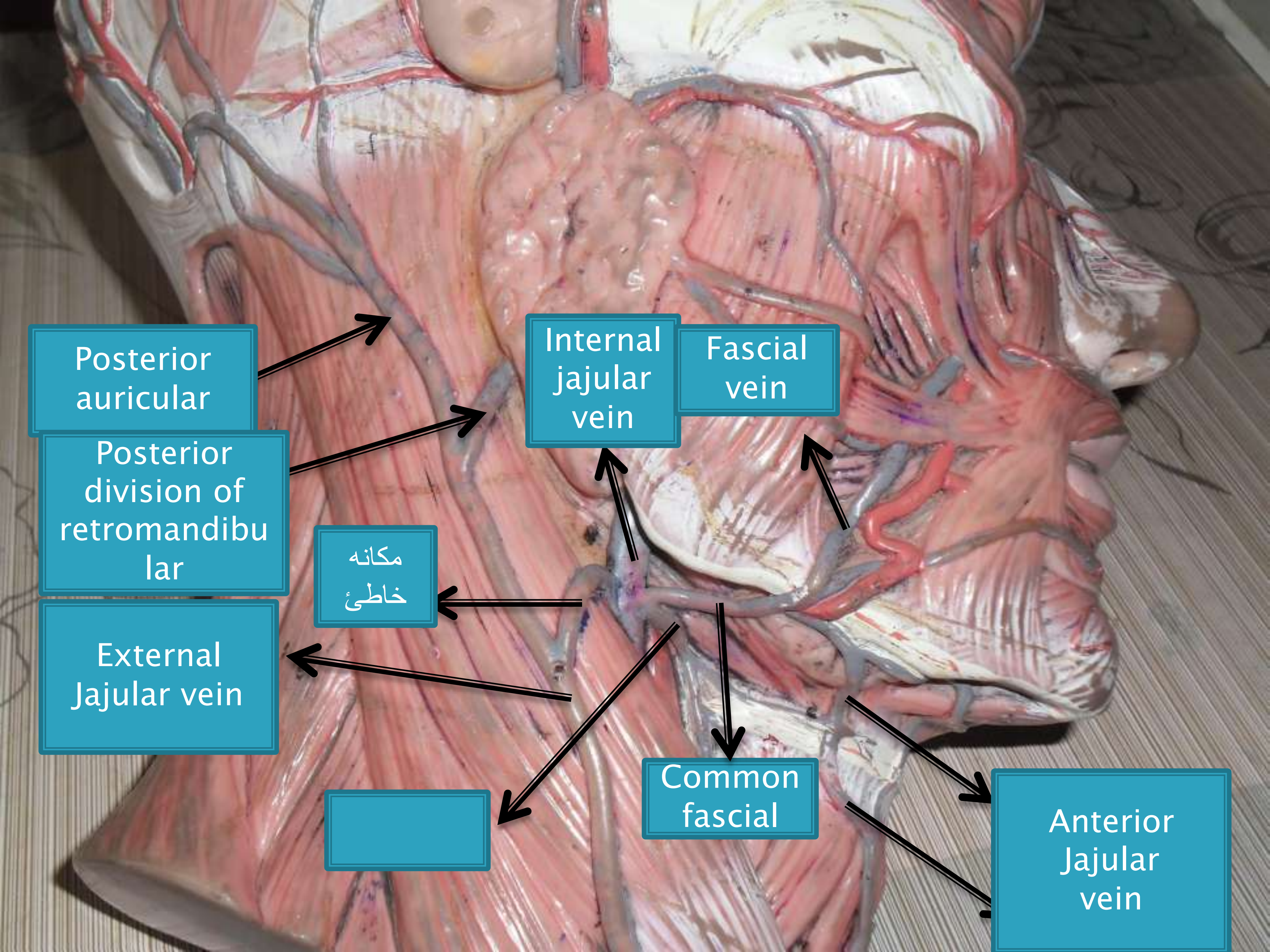
sternohyoid

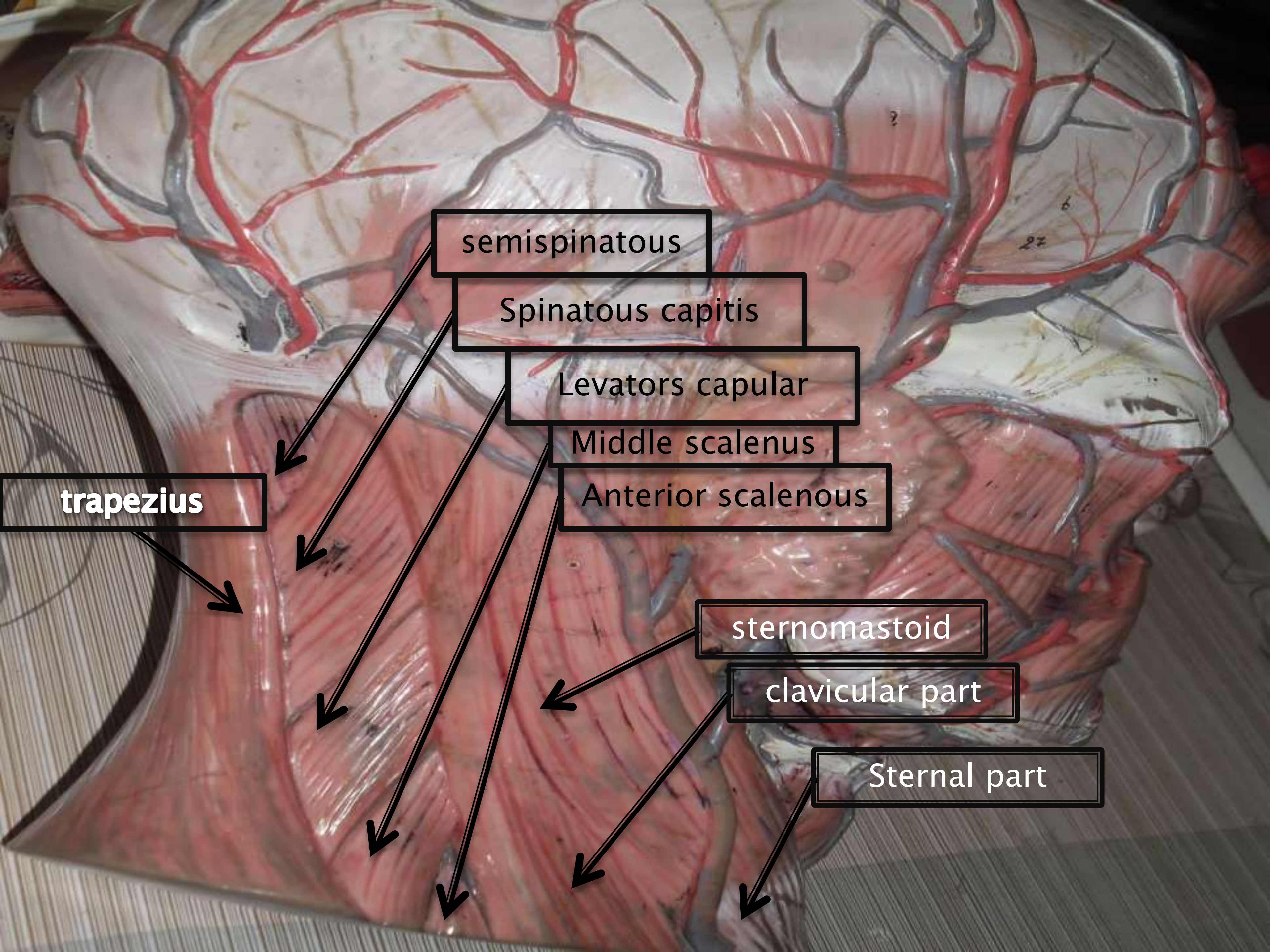
Hyoid bone

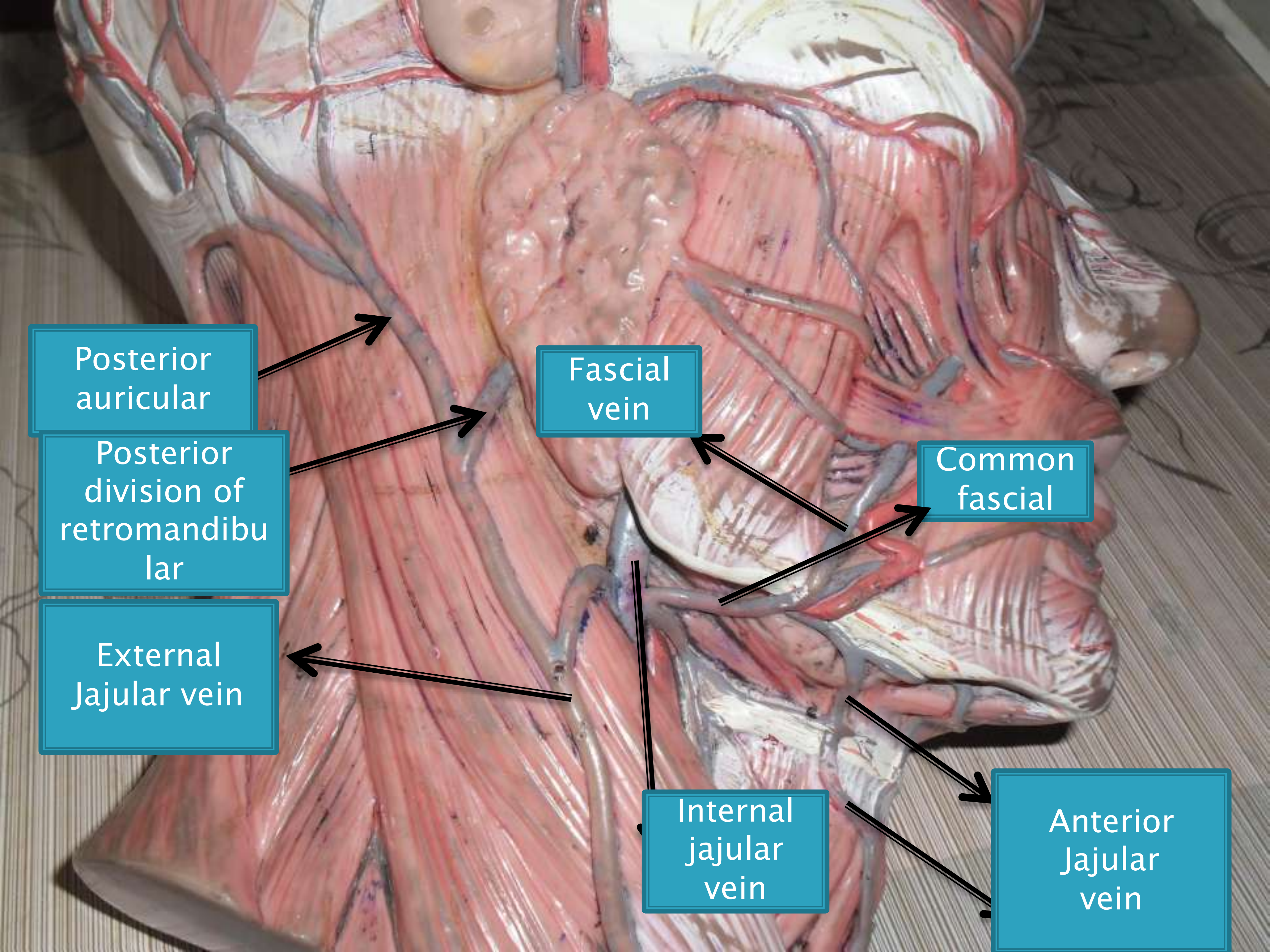
All infra hyoid muscles supply by ansa cervicalis except thyrohyoid muscle supply by C1

Anterior Jujular vein

thyrohyoid muscle


Posterior auricular
Posterior division of retromandibular
مكانه خاطئ
External Jajular vein
Internal jajular vein
Fascial vein
Common fascial
Anterior Jajular vein


semispinatous
Spinatous capitis
Levators capular
Middle scalenus
Anterior scalenous
trapezius
sternomastoid
clavicular part
Sternal part



Posterior auricular

Posterior division of retromandibular

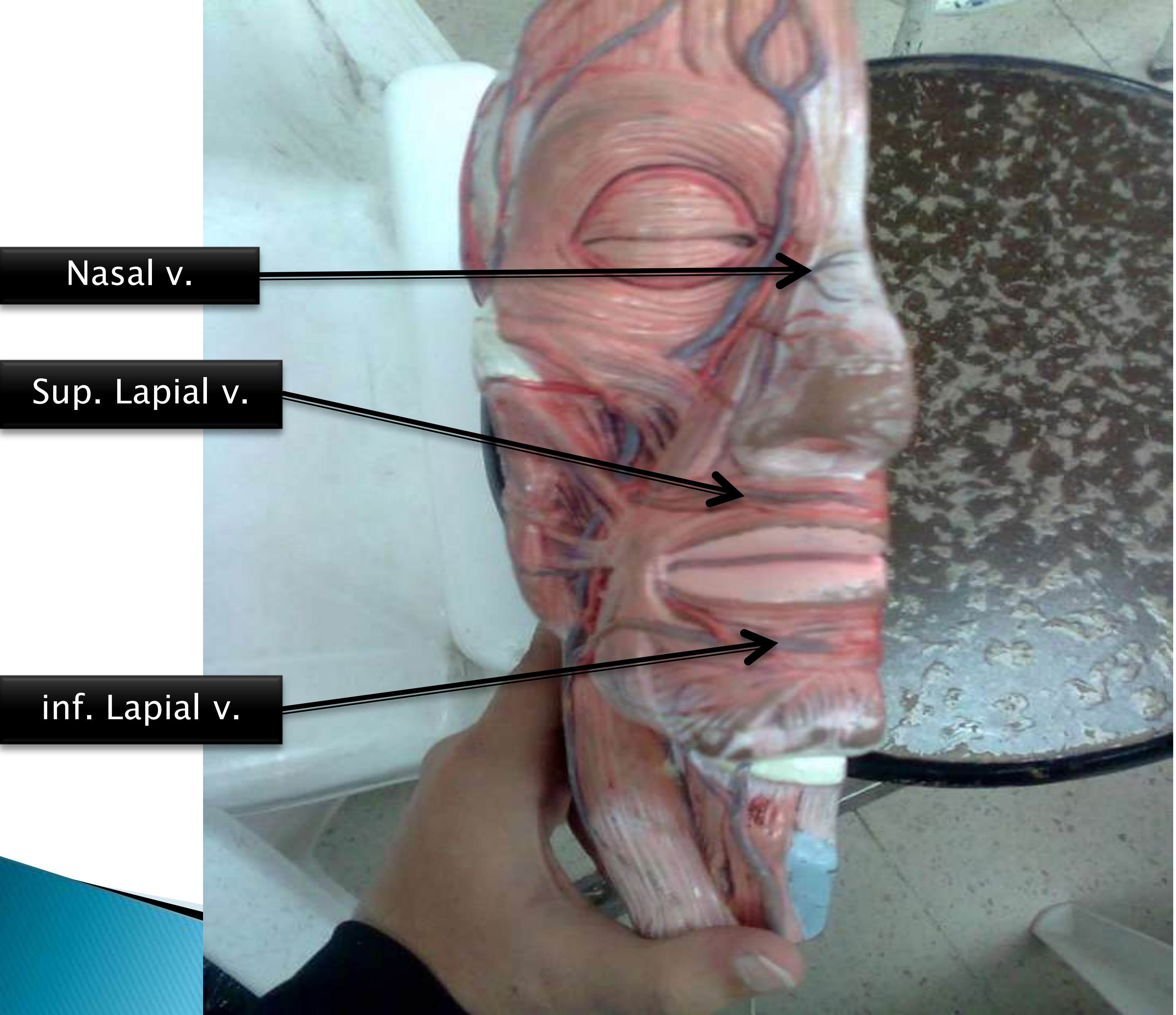
External Jajular vein

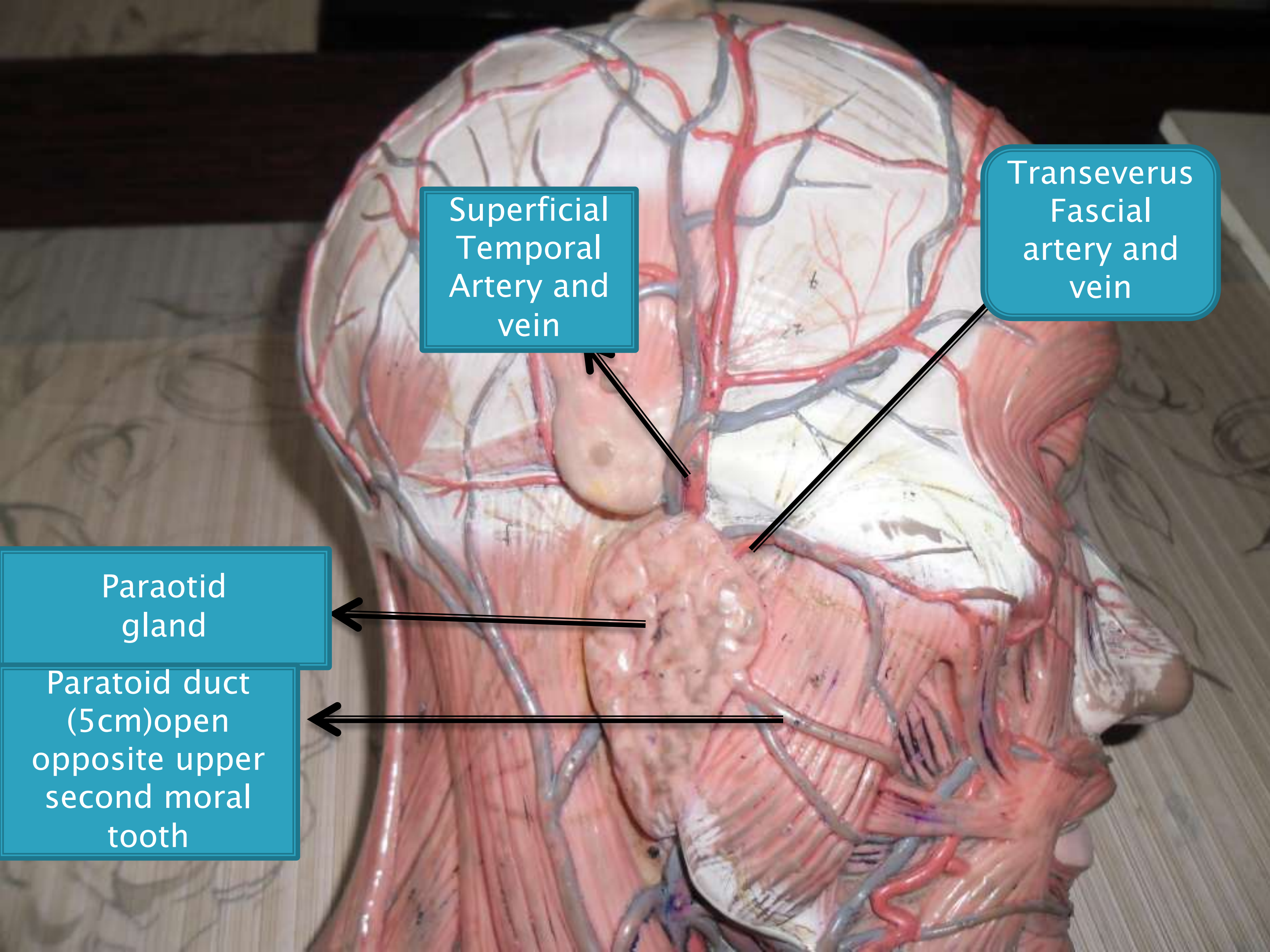
Fascial vein

Common fascial

Internal jajular vein

Anterior Jajular vein


Nasal v.
Sup. Lapial v.
inf. Lapial v.



Superficial Temporal Artery and vein

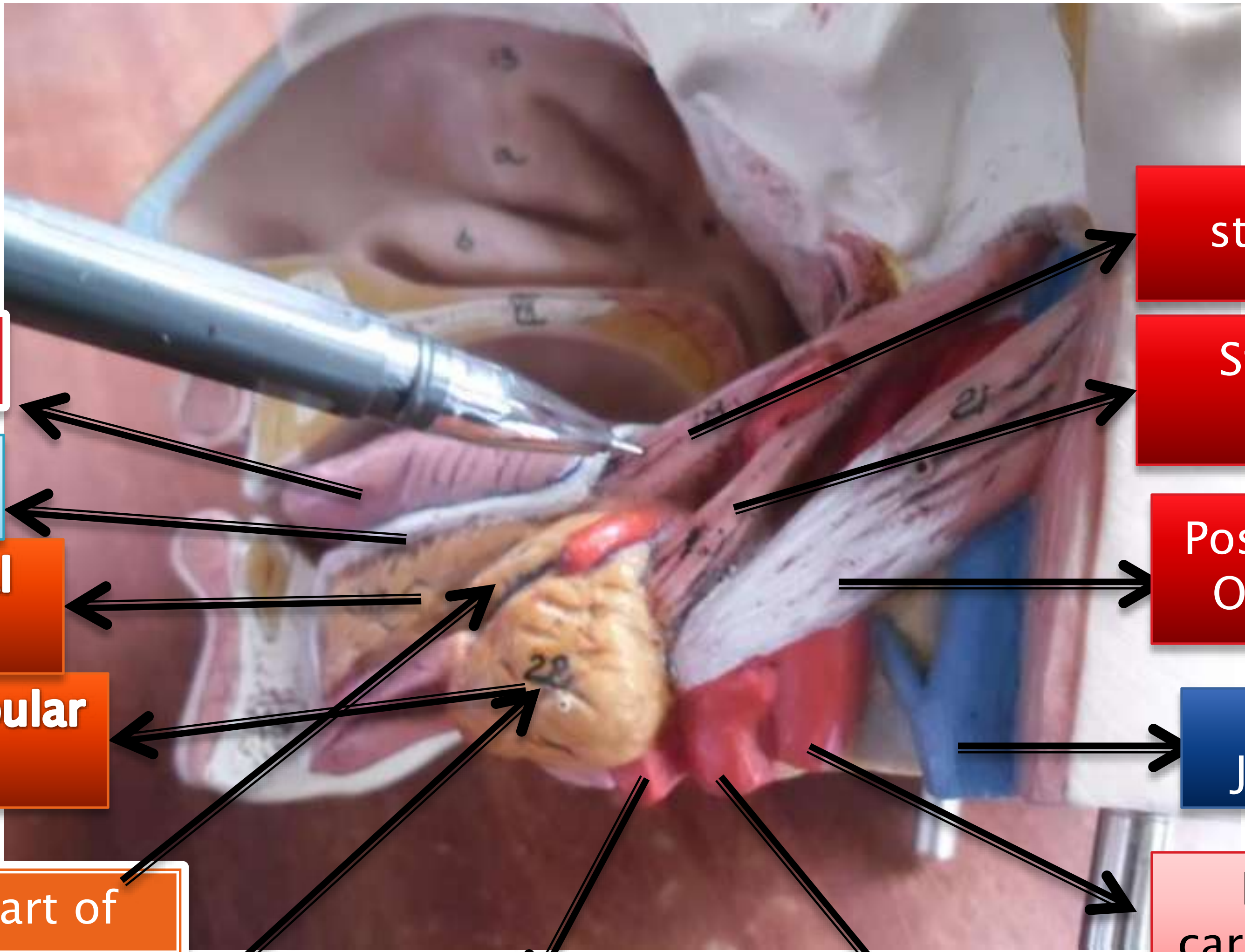
Transeverus Fascial artery and vein

Paraotid gland

Paratoid duct (5cm)open opposite upper second moral tooth

Suprahyoid muscles

There are four muscles :
1)Posterioer belly of digestric :muscle supply by facial nerve
2)Stylohyoid :supply by facial nrve
3)Styloglosus::supply by hypoglssal nerve
4) Stylophyrngous: supply by glossopharyngeal



stylogloss

Stylohyoid muscle

Posterior belly Of digestric

Internal Jajular vein

Internal carotid artery

External carotid artery

Fascial artery

Tongue

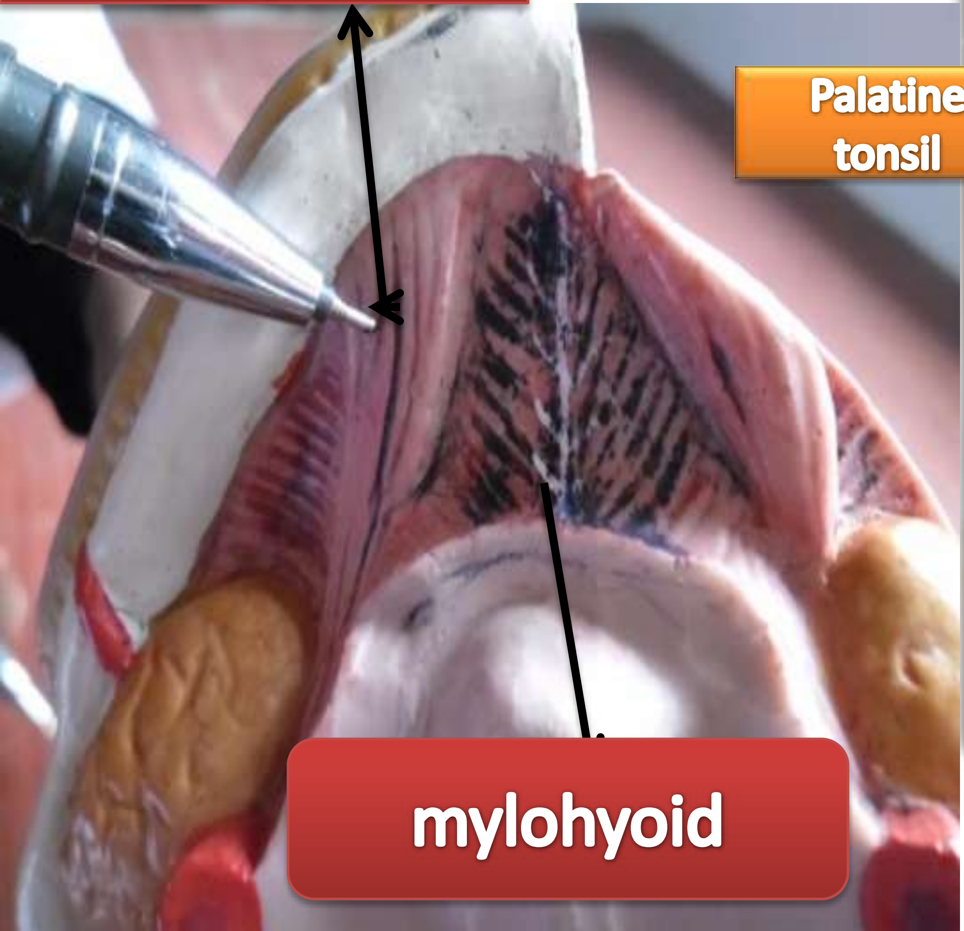
Mucous membrane

Sublingual gland

Submandibular glang

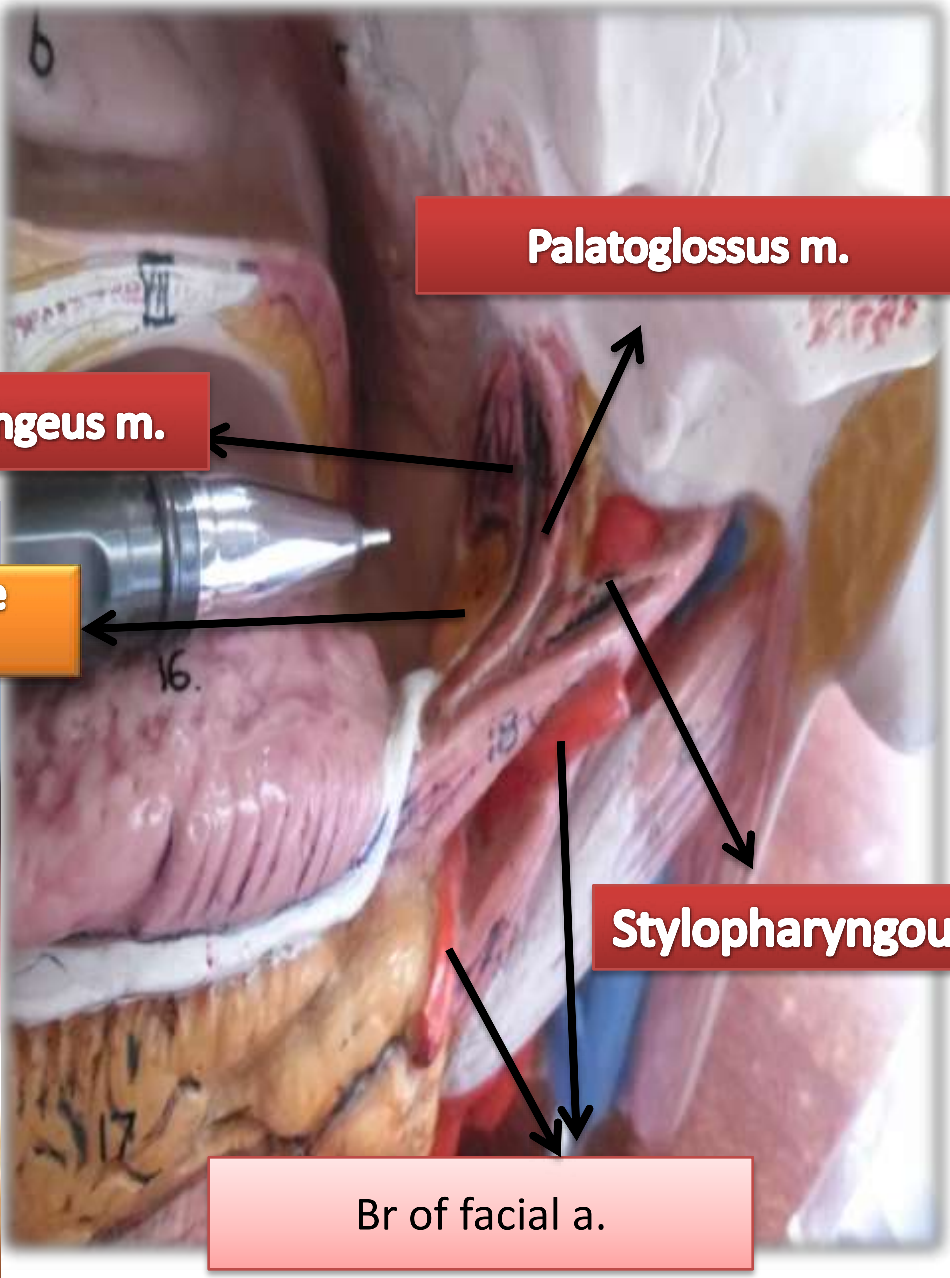
Deep part of

Superficial part of



Anterior belly Of digstric

mylohyoid



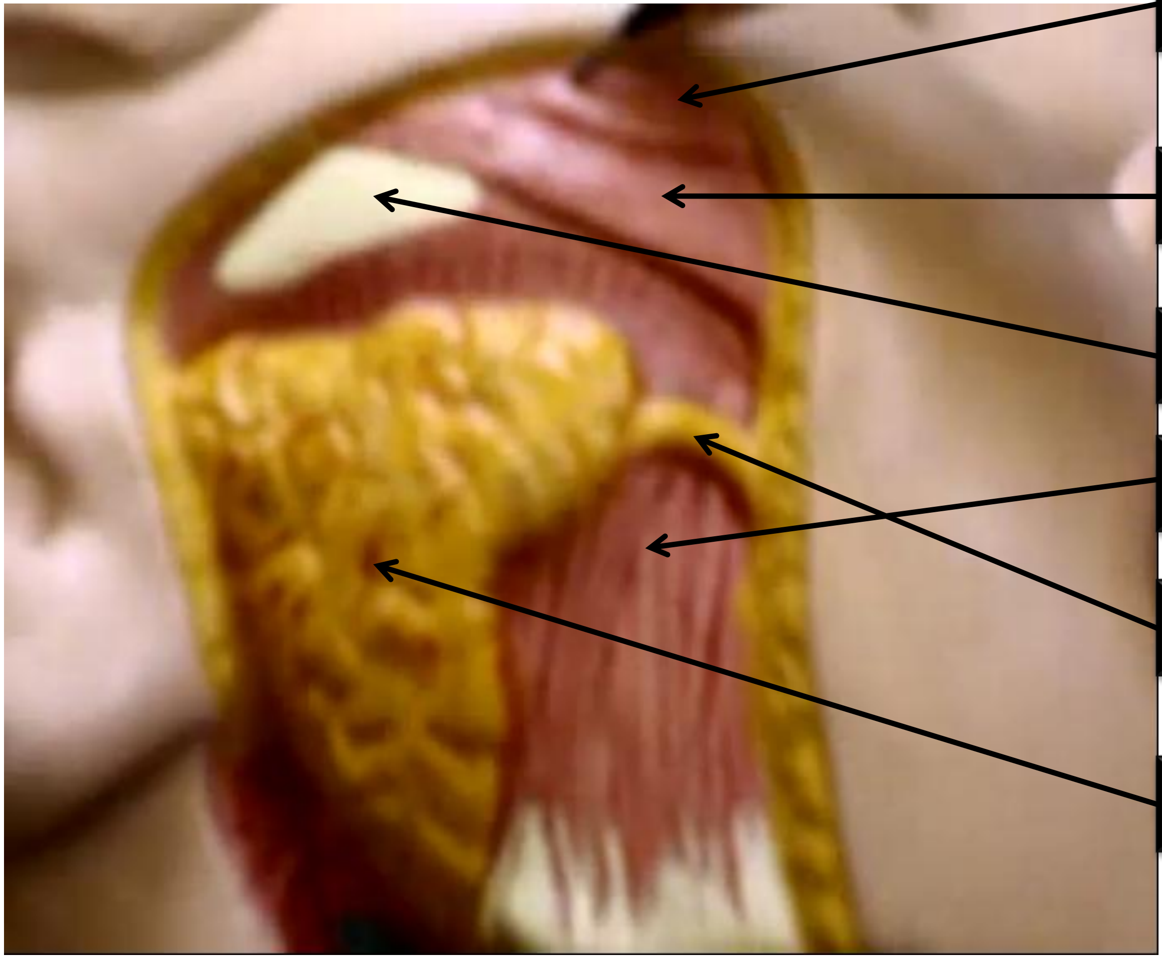
Palatopharangeus m.

Palatoglossus m.

Palatine tonsil

Stylopharyngous

Br of facial a.



Zygomatic minor

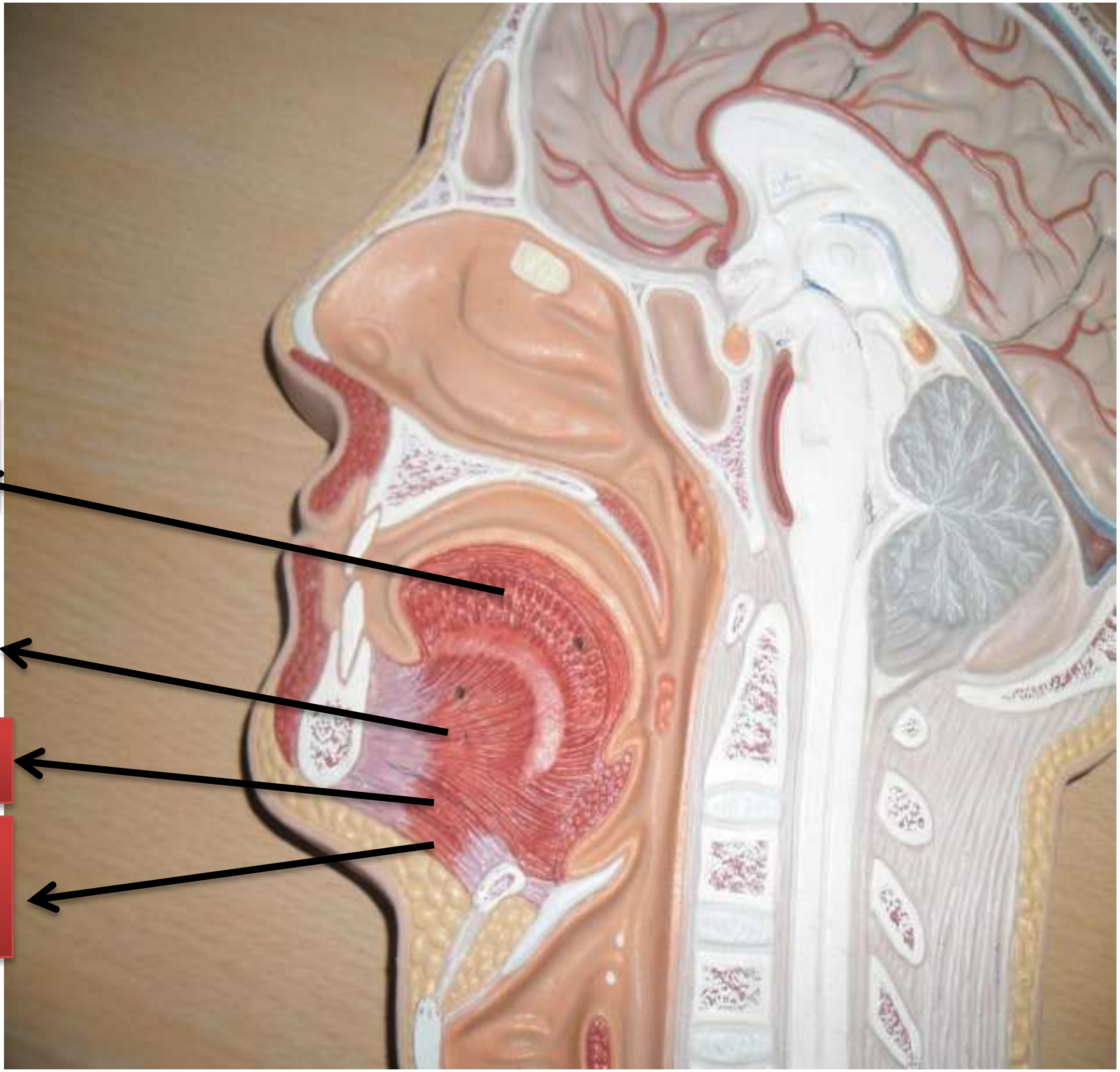
Zygomatic major

Zygomatic arch

Masetr m.

Parotid duct

Parotid gland

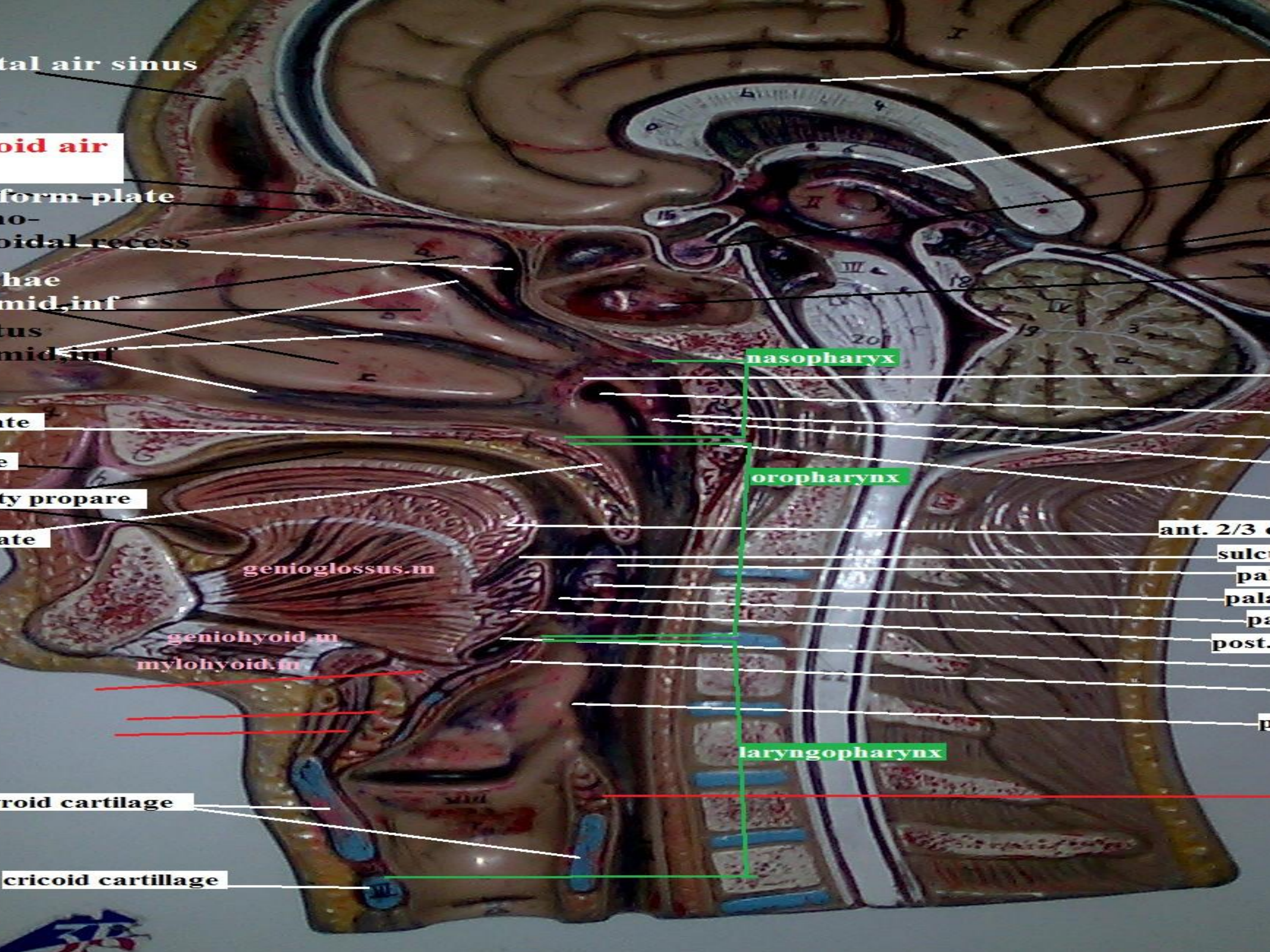


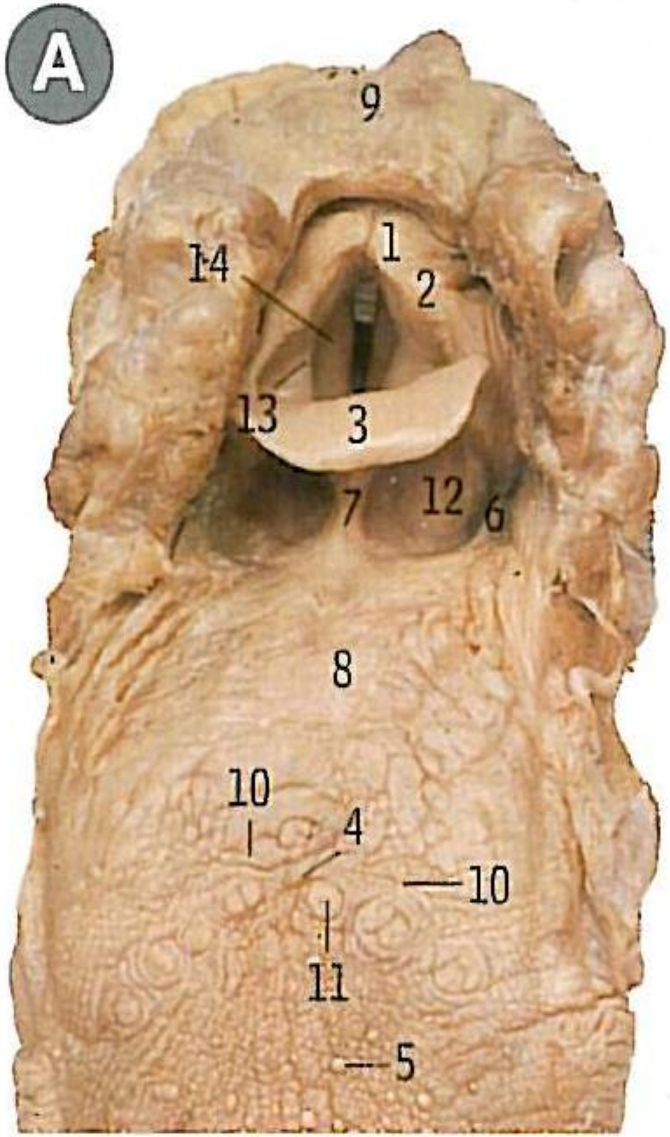
Toung

genioglossus muscle

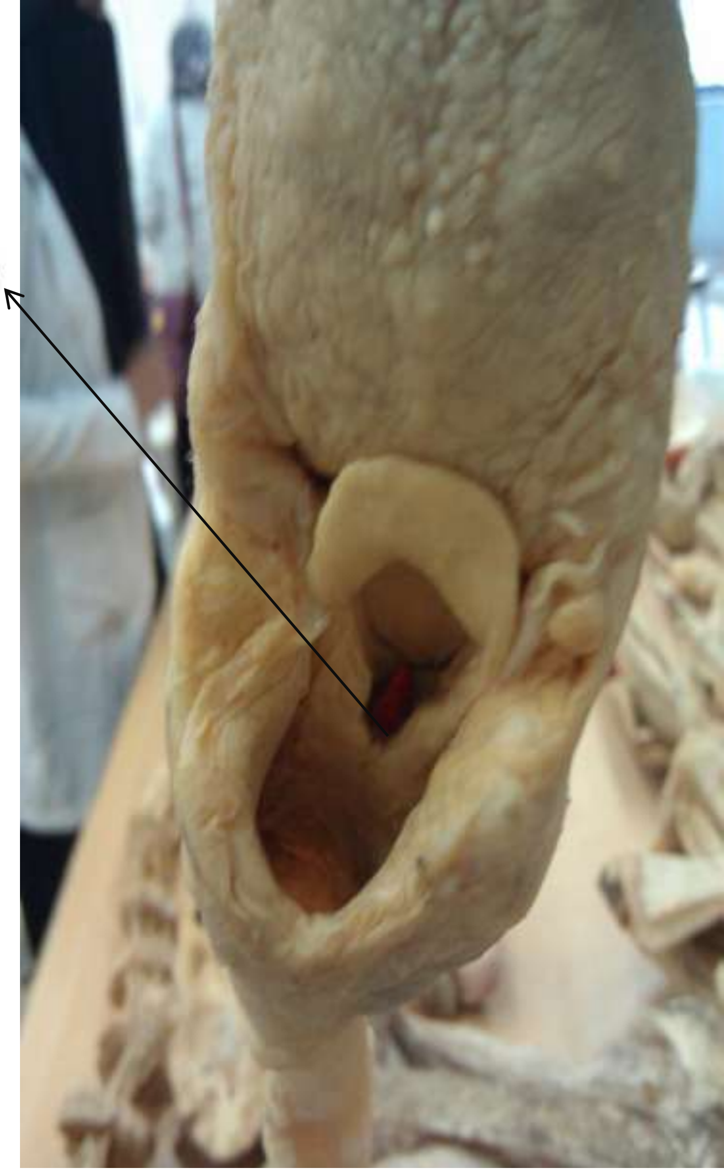
Geniohyoid muscle

Mylohyoid (oral diaphragm)


tal air sinus
oid air
form plate
no-
oidal recess
hae
mid,inf
tus
mid,inf
ate
e
ty propare
ate
genioglossus.m
geniohyoid.m
mylohyoid.m
roid cartilage
cricoid cartillage
nasopharynx
oropharynx
laryngopharynx
ant. 2/3 o
sulcu
pa
pala
pa
post.
p



1 Corniculate cartilage in aryepiglottic fold
2 Cuneiform cartilage in aryepiglottic fold
3 Epiglottis
4 Foramen caecum
5 Fungiform papilla
6 Lateral glosso-epiglottic fold
7 Median glosso-epiglottic fold
8 Pharyngeal part of dorsum of tongue
9 Posterior wall of pharynx
10 Sulcus terminalis
11 Vallate papilla
12 Vallecula
13 Vestibular fold
14 Vocal fold

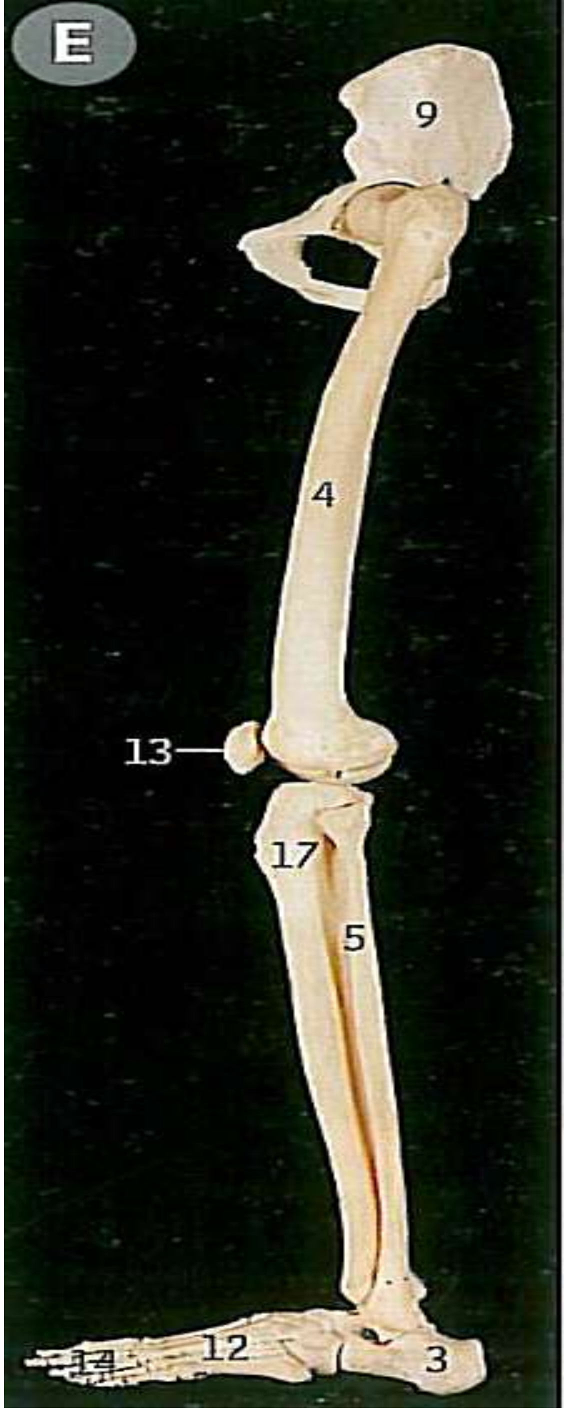


Tongue and the inlet of the larynx *from above*

The V-shaped sulcus terminalis (10), behind the row o vallate papillae (11), is not well marked in this tongue

مهم جدا

Lower limb


E
9
4
13
17
5
12
14
3

Bones of lower limbs:

1)Hip bone(9)

2)Femuer

3)Tibia

4)Febula

5)Skeleton of foot

a)Tarsal b)metatarsal c)phalanges

Hip bone

TYPE: large irrigular bone

IDENTIFY RIGHT OR LEFT:

1)The iliac crest lies above

2)The obtrature foramen lies below

3)The acetabulum direct laterally

4)The ischial tuberosity lies postero inferiorly

Femur

SITE: it is bone of thigh

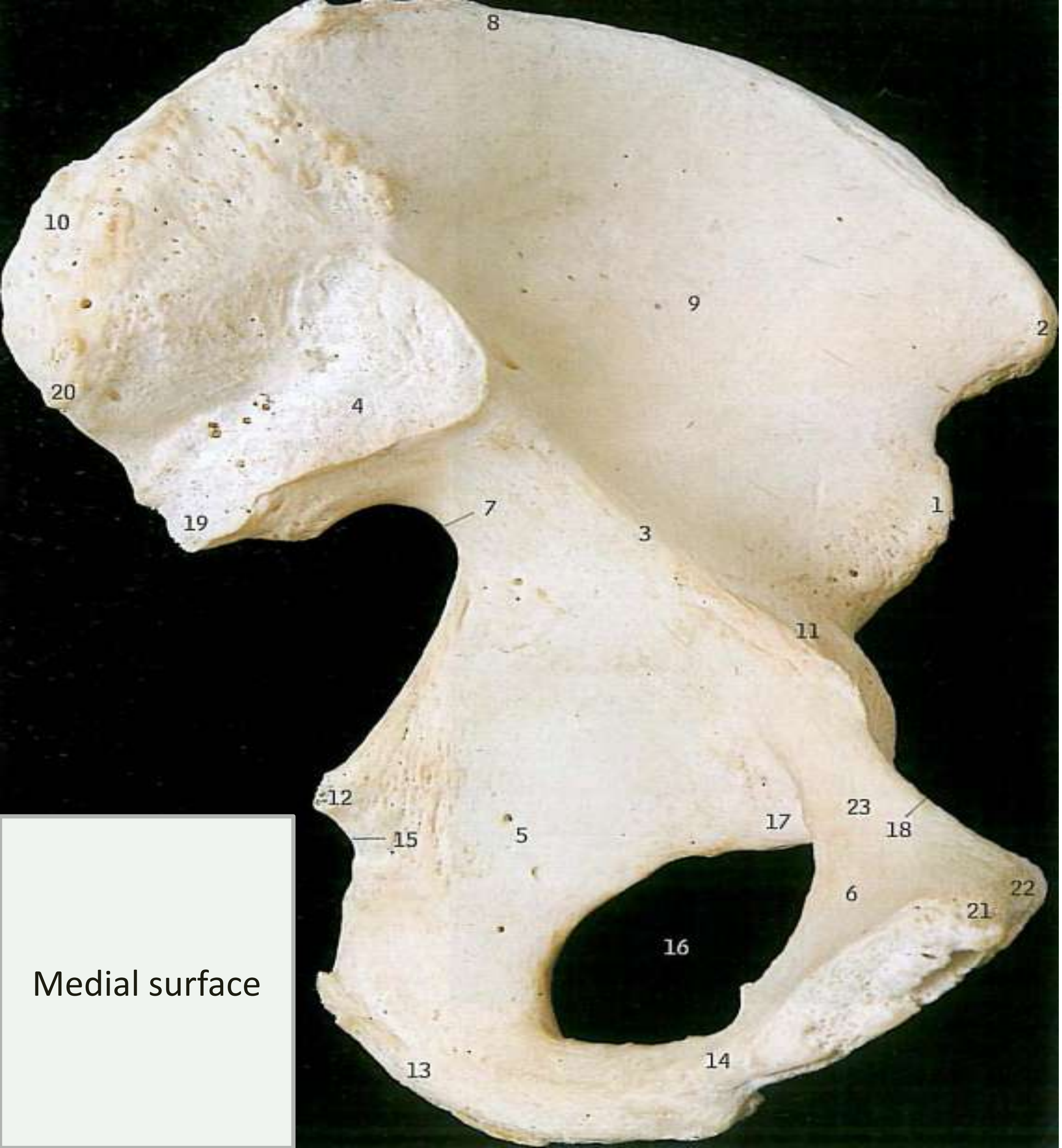
TYPE: typical long bone

IDENTIFY RIGHT OR LEFT:

1)The upper end is idetified by the head

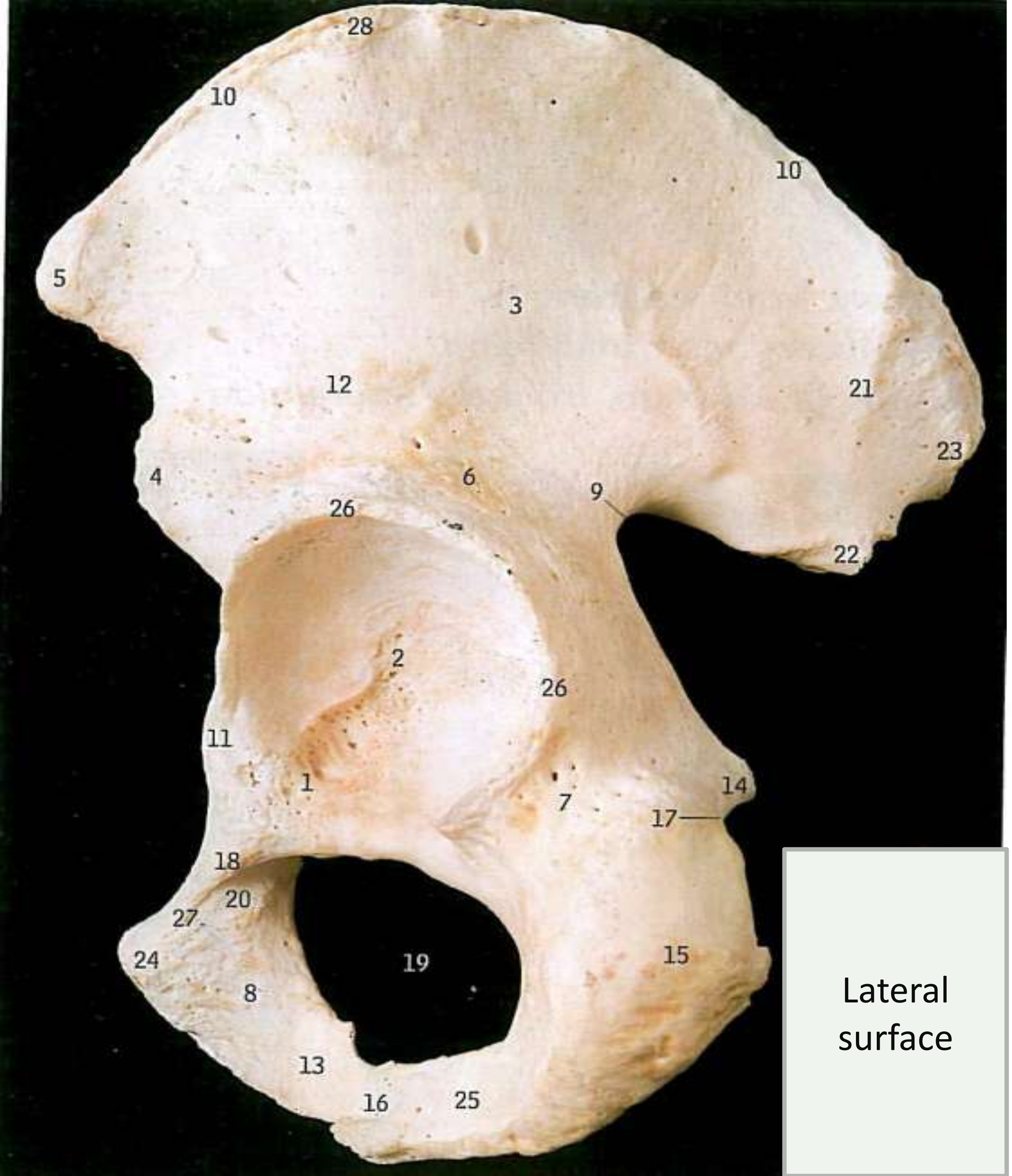
2)The head is directly medially

3)The shaft is convex forward



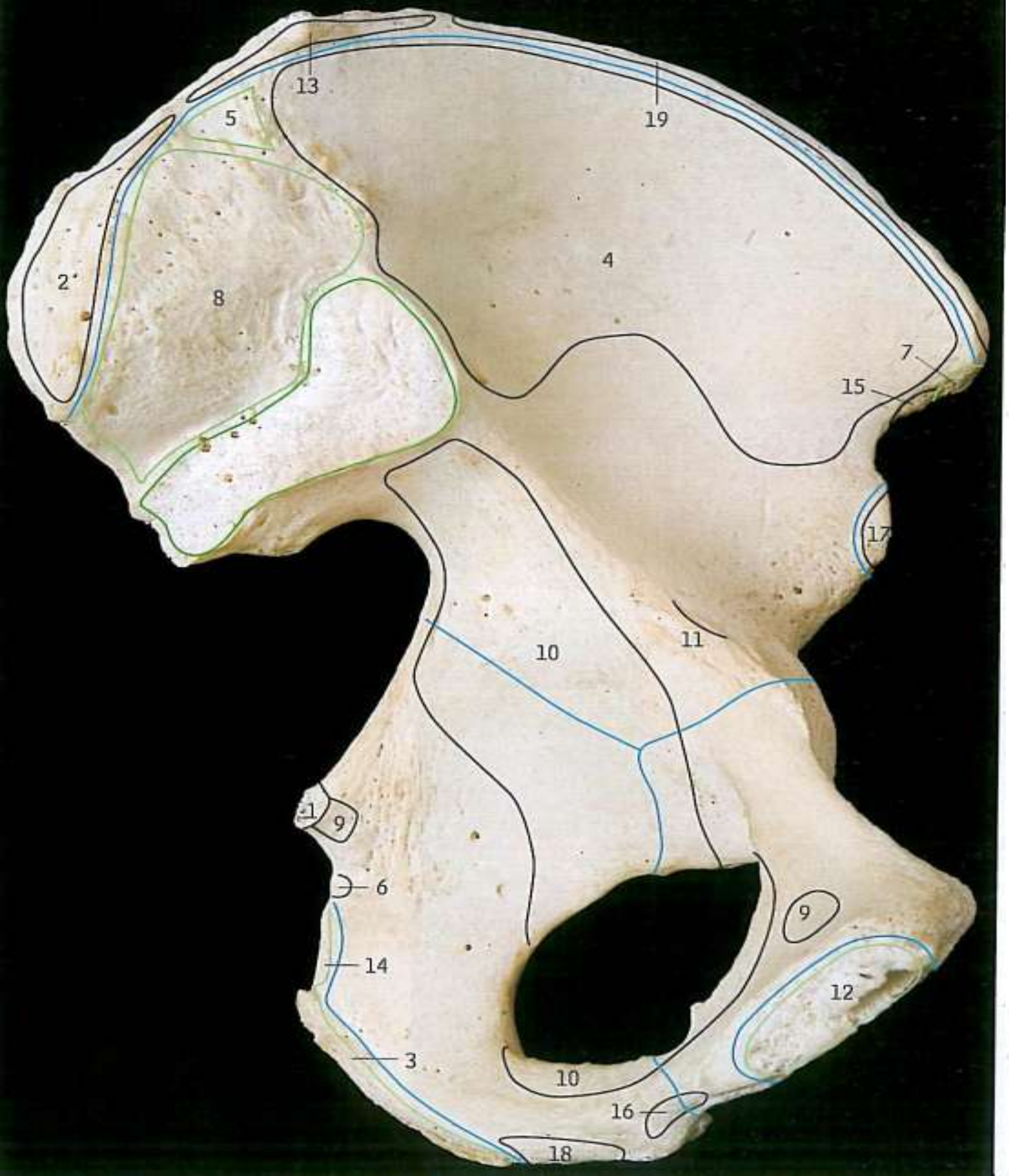
Medial surface

1	Anterior inferior iliac spine
2	Anterior superior iliac spine
3	Arcuate line
4	Auricular surface
5	Body of ischium
6	Body of pubis
7	Greater sciatic notch
8	Iliac crest
9	Iliac fossa
10	Iliac tuberosity
11	Iliopubic eminence
12	Ischial spine
13	Ischial tuberosity
14	Ischiopubic ramus
15	Lesser sciatic notch
16	Obturator foramen
17	Obturator groove
18	Pecten of pubis (pectineal line)
19	Posterior inferior iliac spine
20	Posterior superior iliac spine
21	Pubic crest
22	Pubic tubercle
23	Superior ramus of pubis

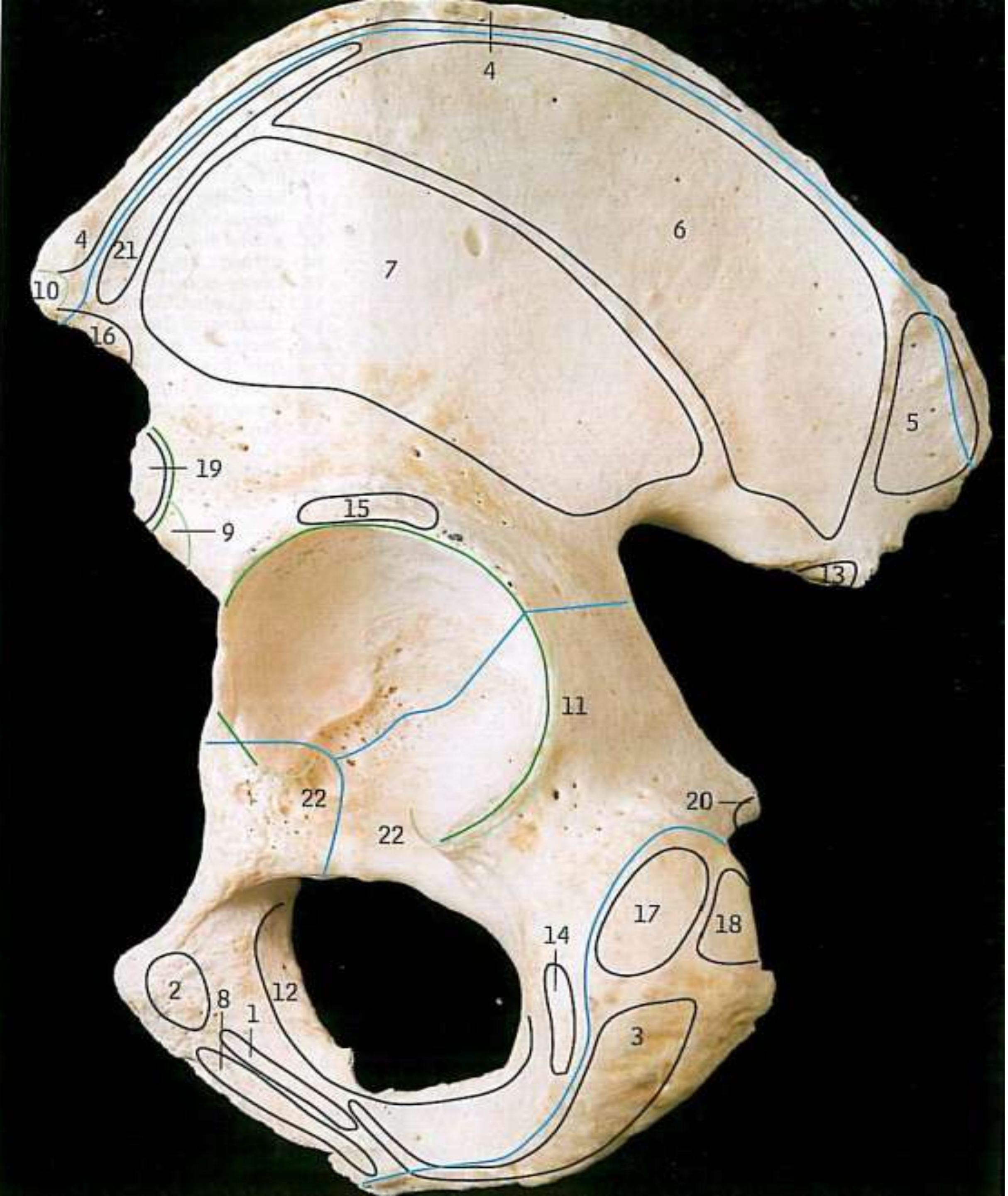


Lateral surface

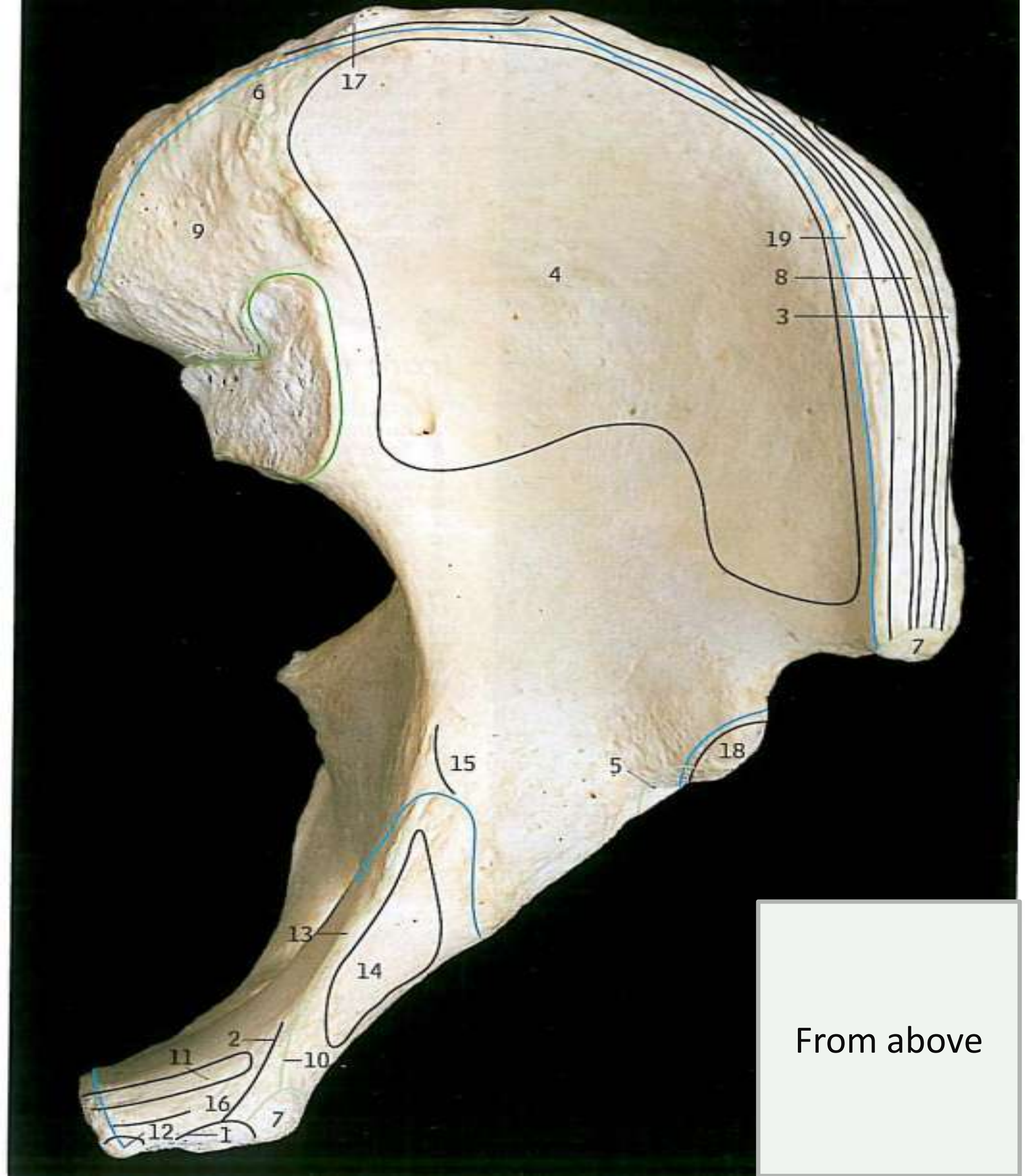
1	Acetabular notch
2	Acetabulum
3	Anterior gluteal line
4	Anterior inferior iliac spine
5	Anterior superior iliac spine
6	Body of ilium
7	Body of ischium
8	Body of pubis
9	Greater sciatic notch
10	Iliac crest
11	Iliopubic eminence
12	Inferior gluteal line
13	Inferior ramus of pubis
14	Ischial spine
15	Ischial tuberosity
16	Junction of 25 and 13
17	Lesser sciatic notch
18	Obturator crest
19	Obturator foramen
20	Obturator groove
21	Posterior gluteal line
22	Posterior inferior iliac spine
23	Posterior superior iliac spine
24	Pubic tubercle
25	Ramus of ischium
26	Rim of acetabulum
27	Superior ramus of pubis
28	Tubercle of iliac crest



1	Coccygeus and sacrospinous ligament
2	Erector spinae
3	Falciform process of sacrotuberous ligament
4	Iliacus
5	Iliolumbar ligament
6	Inferior gemellus
7	Inguinal ligament
8	Interosseous sacro-iliac ligament
9	Levator ani
10	Obturator internus
11	Psoas minor
12	Pubic symphysis
13	Quadratus lumborum
14	Sacrotuberous ligament
15	Sartorius
16	Sphincter urethrae
17	Straight head of rectus femoris
18	Superficial transverse perineal and ischiocavernosus
19	Transversus abdominis

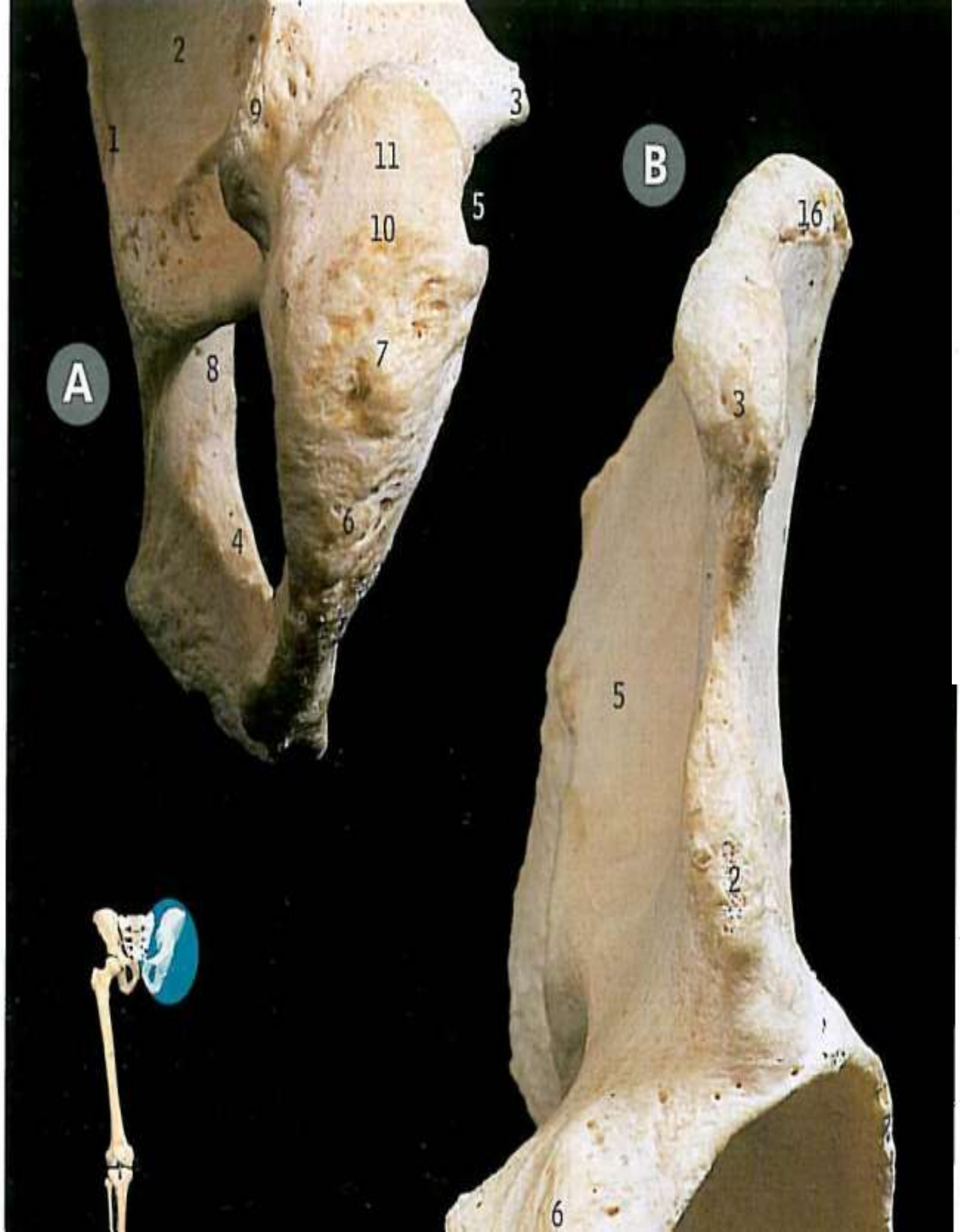


1	Adductor brevis
2	Adductor longus
3	Adductor magnus
4	External oblique
5	Gluteus maximus
6	Gluteus medius
7	Gluteus minimus
8	Gracilis
9	Iliofemoral ligament
10	Inguinal ligament
11	Ischiofemoral ligament
12	Obturator externus
13	Piriformis
14	Quadratus femoris
15	Reflected head of rectus femoris
16	Sartorius
17	Semimembranosus
18	Semitendinosus and long head of biceps
19	Straight head of rectus femoris
20	Superior gemellus
21	Tensor fasciae latae
22	Transverse ligament



From above

1 Anterior wall of rectus sheath
2 Conjoint tendon
3 External oblique
4 Iliacus
5 Iliofemoral ligament
6 Iliolumbar ligament
7 Inguinal ligament
8 Internal oblique
9 Interosseous sacro-iliac ligament
10 Lacunar ligament
11 Lateral head of rectus abdominis
12 Medial head of rectus abdominis
13 Pectineal ligament
14 Pectineus
15 Psoas minor
16 Pyramidalis
17 Quadratus lumborum
18 Straight head of rectus femoris
19 Transversus abdominis



ischial tuberosity, from behind and below

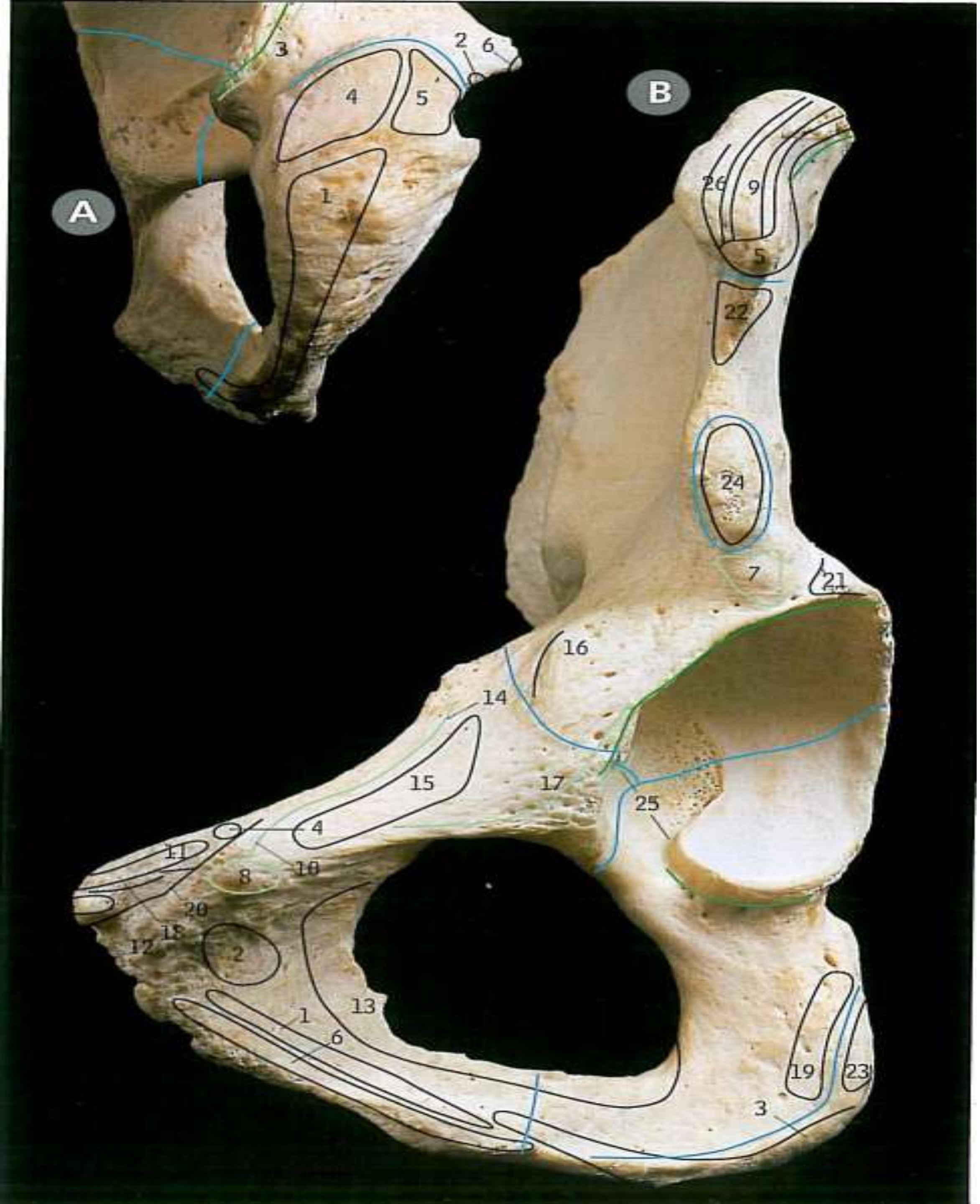
A

1 Acetabular notch
2 Acetabulum
3 Ischial spine
4 Ischiopubic ramus
5 Lesser sciatic notch
6 Longitudinal ridge
7 Lower part of tuberosity
8 Obturator groove
9 Rim of acetabulum
10 Transverse ridge
11 Upper part of tuberosity

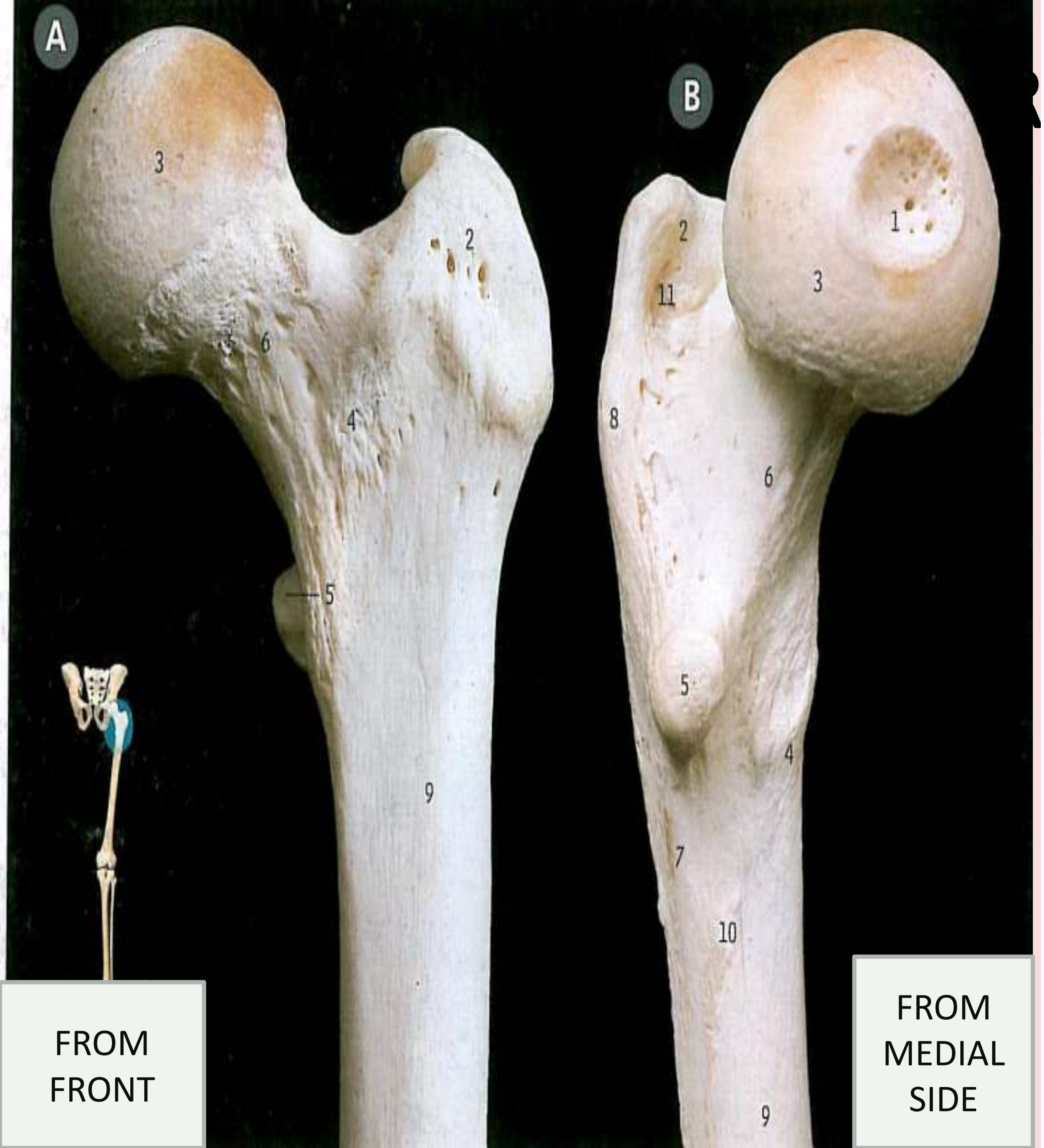
from the front

B

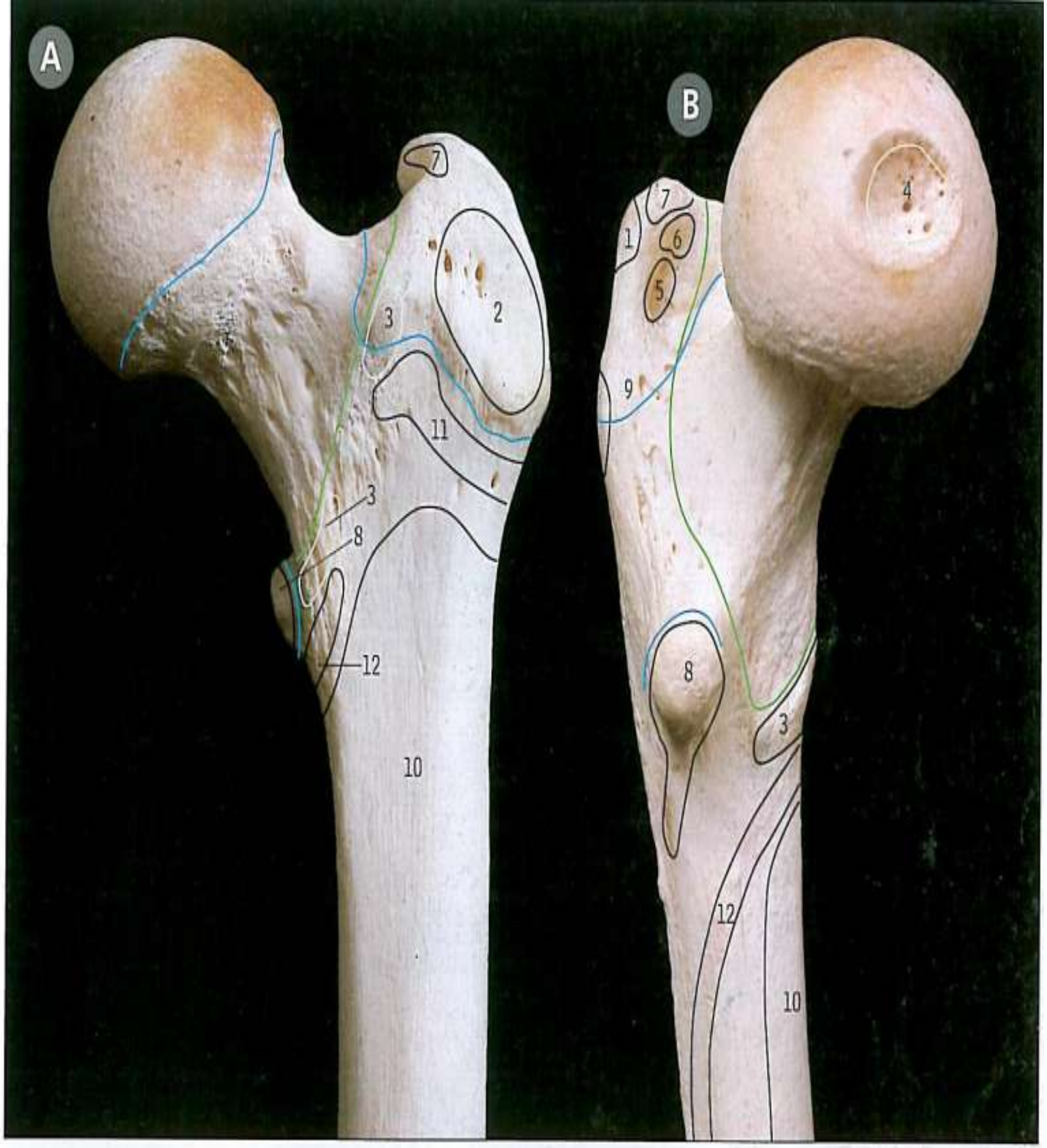
1 Acetabular notch
2 Anterior inferior iliac spine
3 Anterior superior iliac spine
4 Body of pubis
5 Iliac fossa
6 Iliopubic eminence
7 Ischial tuberosity
8 Ischiopubic ramus
9 Obturator crest
10 Obturator foramen
11 Obturator groove
12 Pecten of pubis (pectineal line)
13 Pubic crest
14 Pubic tubercle
15 Rim of acetabulum
16 Tubercle of iliac crest



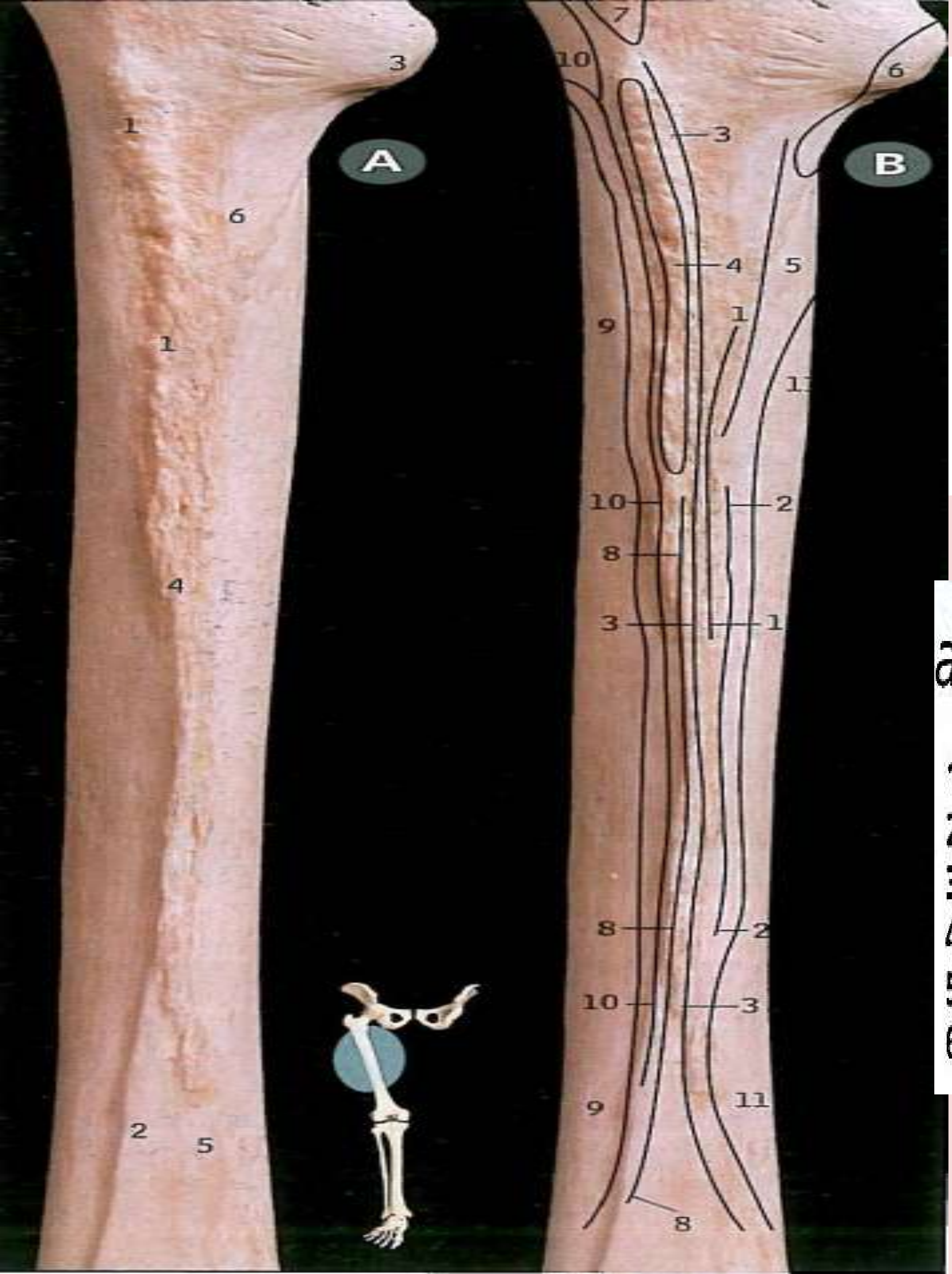
1	Adductor brevis
2	Adductor longus
3	Adductor magnus
4	Conjoint tendon
5	External oblique and inguinal ligament
6	Gracilis
7	Iliofemoral ligament
8	Inguinal ligament
9	Internal oblique
10	Lacunar ligament
11	Lateral head of rectus abdominis
12	Medial head of rectus abdominis
13	Obturator externus
14	Pectineal ligament
15	Pectineus
16	Psoas minor
17	Pubofemoral ligament
18	Pyramidalis
19	Quadratus femoris
20	Rectus sheath
21	Reflected head of rectus femoris
22	Sartorius
23	Semimembranosus
24	Straight head of rectus femoris
25	Transverse ligament
26	Transversus abdominis


A
3
2
6
4
5
9
FROM FRONT
B
2
11
1
3
8
6
5
4
7
10
9
FROM MEDIAL SIDE

1 Fovea of head
2 Greater trochanter
3 Head
4 Intertrochanteric line
5 Lesser trochanter
6 Neck
7 Pectineal line
8 Quadrate tubercle on intertrochanteric crest
9 Shaft
10 Spiral line
11 Trochanteric fossa


A
B
7
2
3
11
3
8
12
10
1
7
6
5
4
9
8
3
12
10

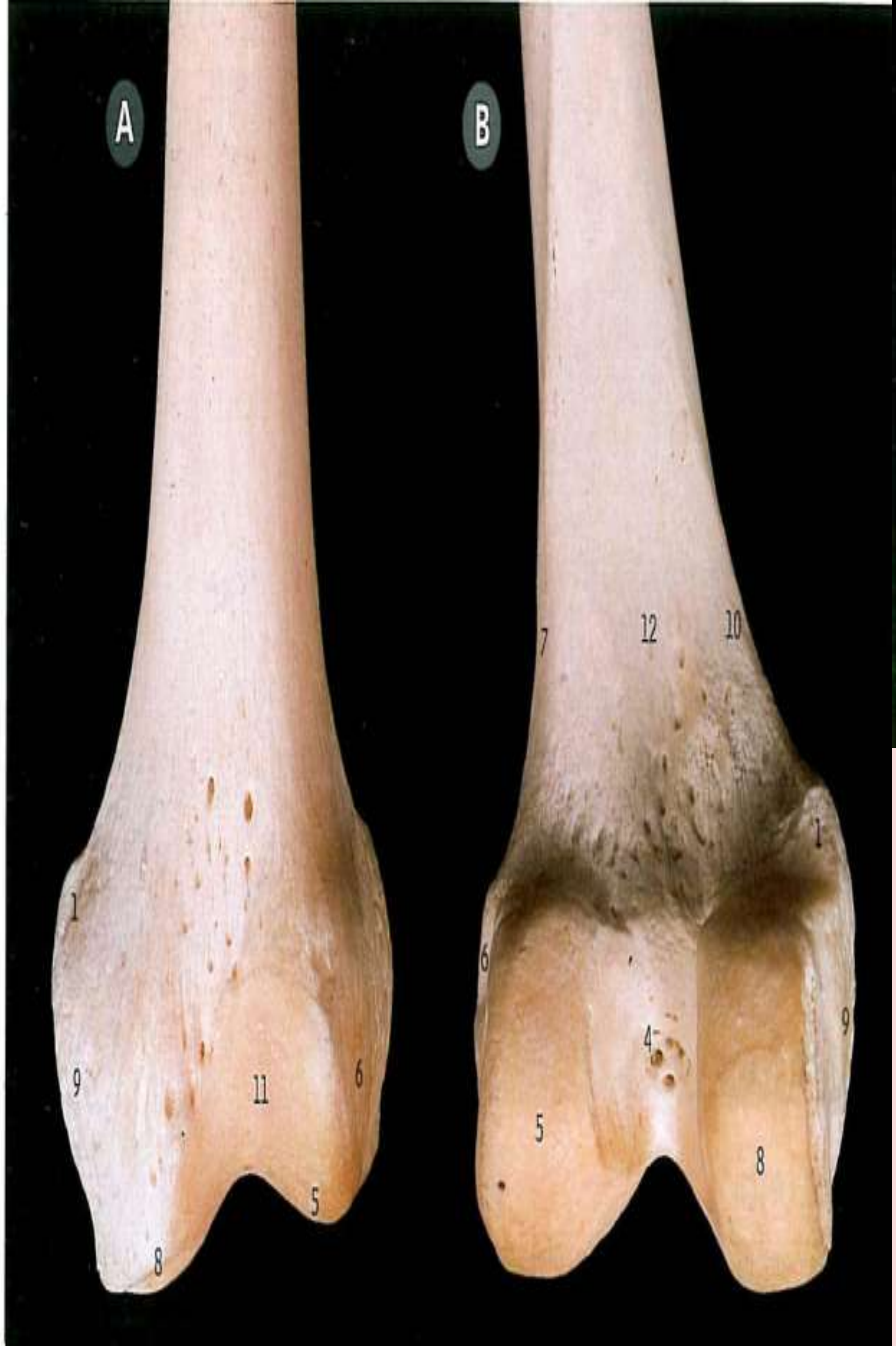
1 Gluteus medius
2 Gluteus minimus
3 Iliofemoral ligament
4 Ligament of head of femur
5 Obturator externus
6 Obturator internus and gemelli
7 Piriformis
8 Psoas major and iliacus
9 Quadratus femoris
10 Vastus intermedius
11 Vastus lateralis
12 Vastus medialis

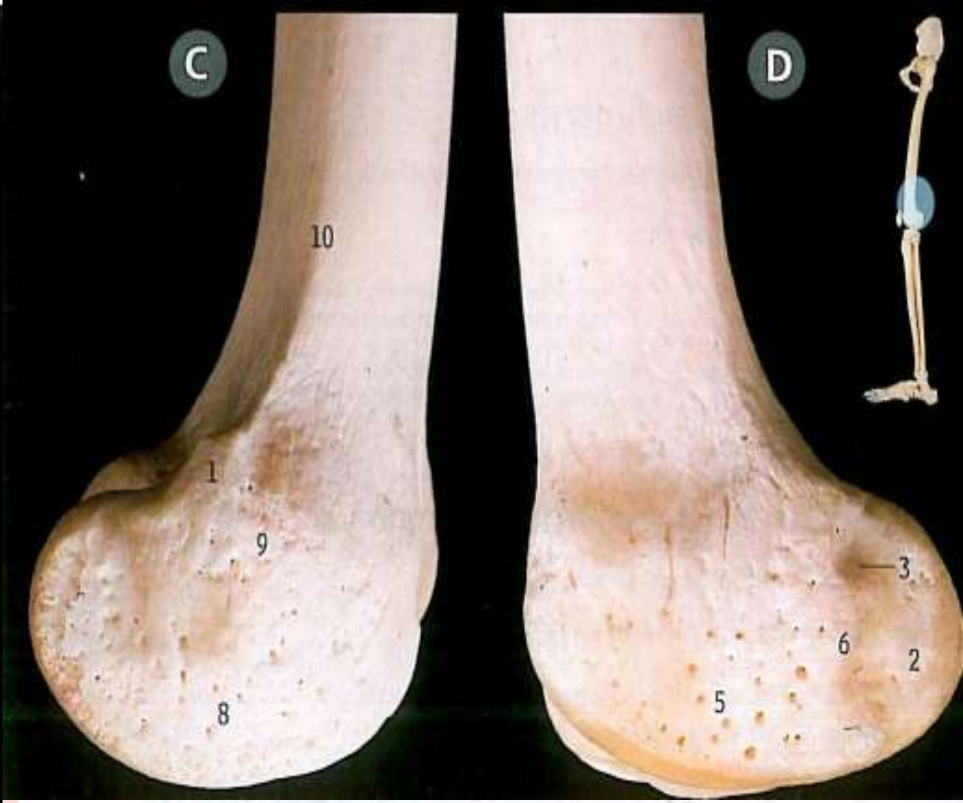


1 Calcar femorale
2 From lateral surface of shaft to greater trochanter
3 From lateral surface of shaft to head
4 From medial surface of shaft to greater trochanter
5 From medial surface of shaft to head
6 Triangular area of few trabeculae

attachments, shaft, from behind

1 Adductor brevis
2 Adductor longus
3 Adductor magnus
4 Gluteus maximus
5 Pectineus
6 Psoas and iliacus
7 Quadratus femoris
8 Short head of biceps
9 Vastus intermedius
10 Vastus lateralis
11 Vastus medialis





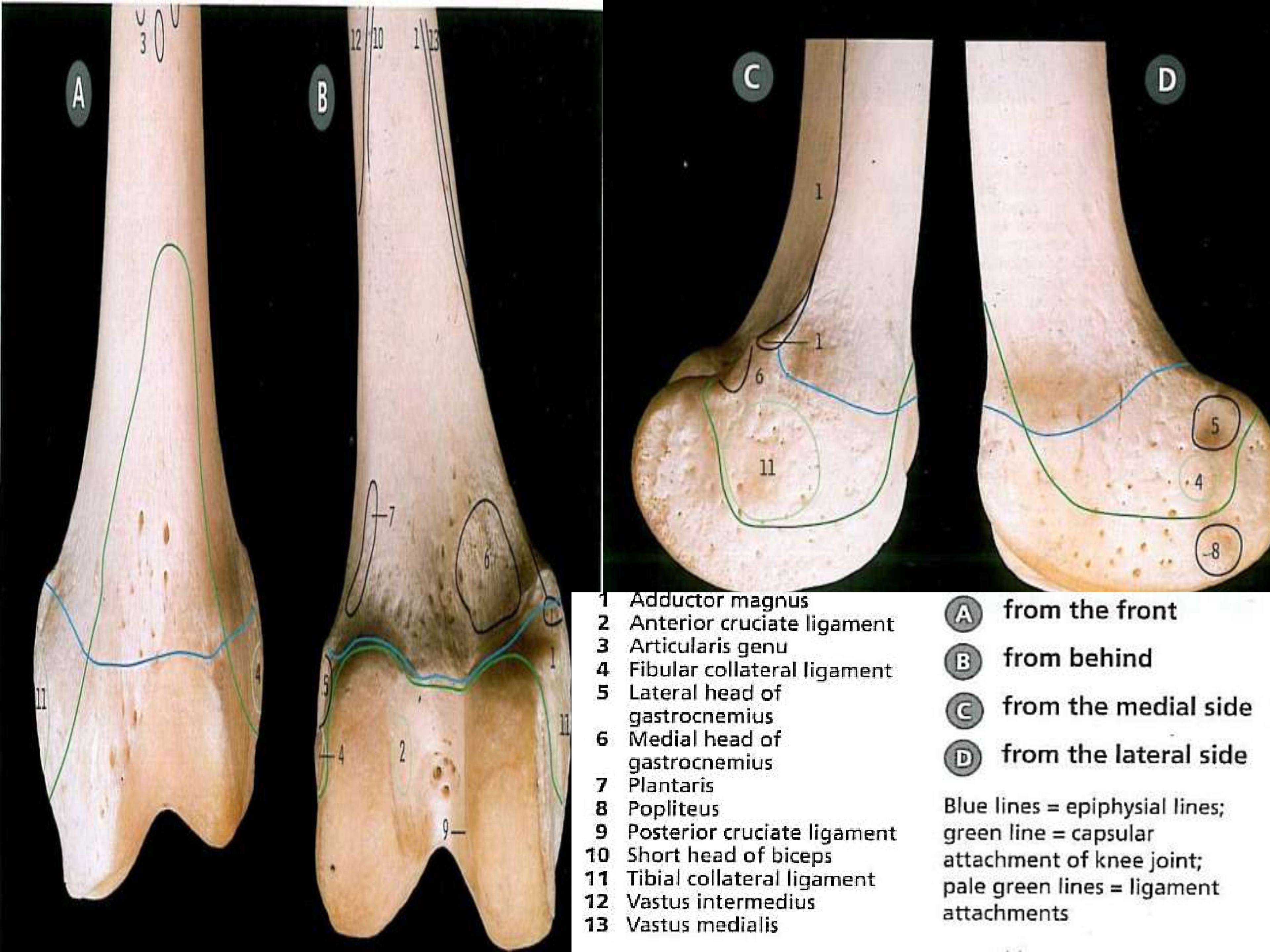
Ⓐ **from the front**

Ⓑ **from behind**

Ⓒ **from the medial side**

Ⓓ **from the lateral side**

1 Adductor tubercle
2 Groove for popliteus tendon
3 Impression for lateral head of gastrocnemius
4 Intercondylar fossa
5 Lateral condyle
6 Lateral epicondyle
7 Lateral supracondylar line
8 Medial condyle
9 Medial epicondyle
10 Medial supracondylar line
11 Patellar surface
12 Popliteal surface



1 Adductor magnus
2 Anterior cruciate ligament
3 Articularis genu
4 Fibular collateral ligament
5 Lateral head of gastrocnemius
6 Medial head of gastrocnemius
7 Plantaris
8 Popliteus
9 Posterior cruciate ligament
10 Short head of biceps
11 Tibial collateral ligament
12 Vastus intermedius
13 Vastus medialis

Ⓐ from the front
Ⓑ from behind
Ⓒ from the medial side
Ⓓ from the lateral side

Blue lines = epiphysial lines; green line = capsular attachment of knee joint; pale green lines = ligament attachments

Tibia and fibula(bones of legs)

TIBIA

1)**TYPE** :typical long bone

2)**SITE**: medial bone of leg

3) **IDENTIFY RIGHT OR LEFT** :

1)Upper end is large & carries 2 condyles while the lower end is smaller & presents mad malleolus

2)The tibia tubersity is directly forward

3)The med malleolus lies medially

FIBULA

1)**TYPE**: it is a very thin long bone

2)**SITE** : it is the lateral bone of the leg

3)**OSSIFICATION** :

-one 1ry center for the shaft

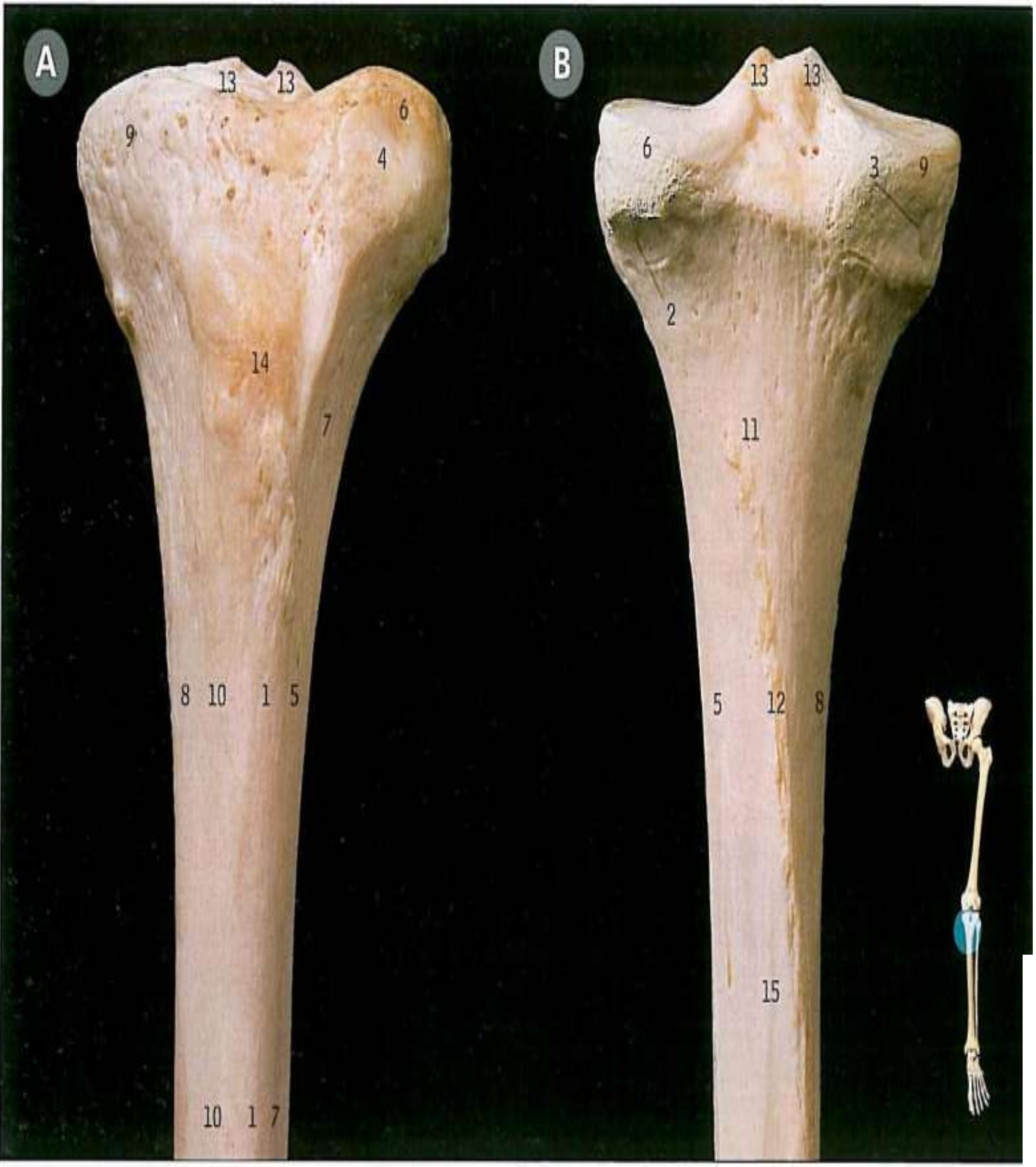
-two 2ry centers for the 2ends

IDENTIFY RIGHT OR LEFT:

Look to the medial side of the lower end :

If the mallular fossa lies to the right is the right fibula

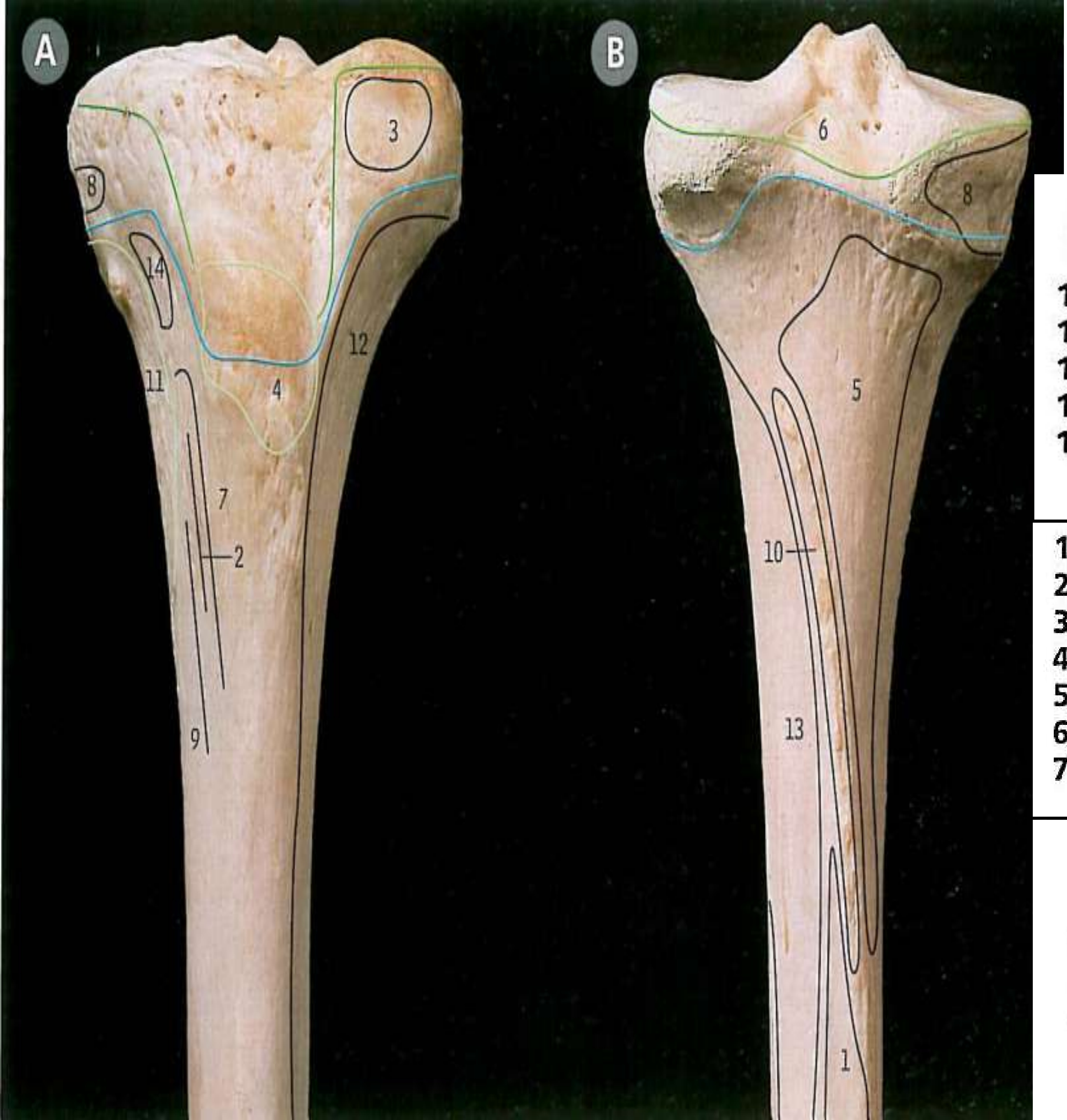
If the mallular fossa lies to the left is the left fibula


A
13
13
9
6
4
14
7
8
10
1
5
10
1
7
B
13
13
6
3
9
2
11
5
12
8
15

1 Anterior border
2 Articular facet for fibula
3 Groove for semimembranosus
4 Impression for iliotibial tract
5 Interosseous border
6 Lateral condyle
7 Lateral surface
8 Medial border
9 Medial condyle
10 Medial surface
11 Posterior surface
12 Soleal line
13 Tubercles of intercondylar eminence
14 Tuberosity
15 Vertical line

Ⓐ from the front

Ⓑ from behind



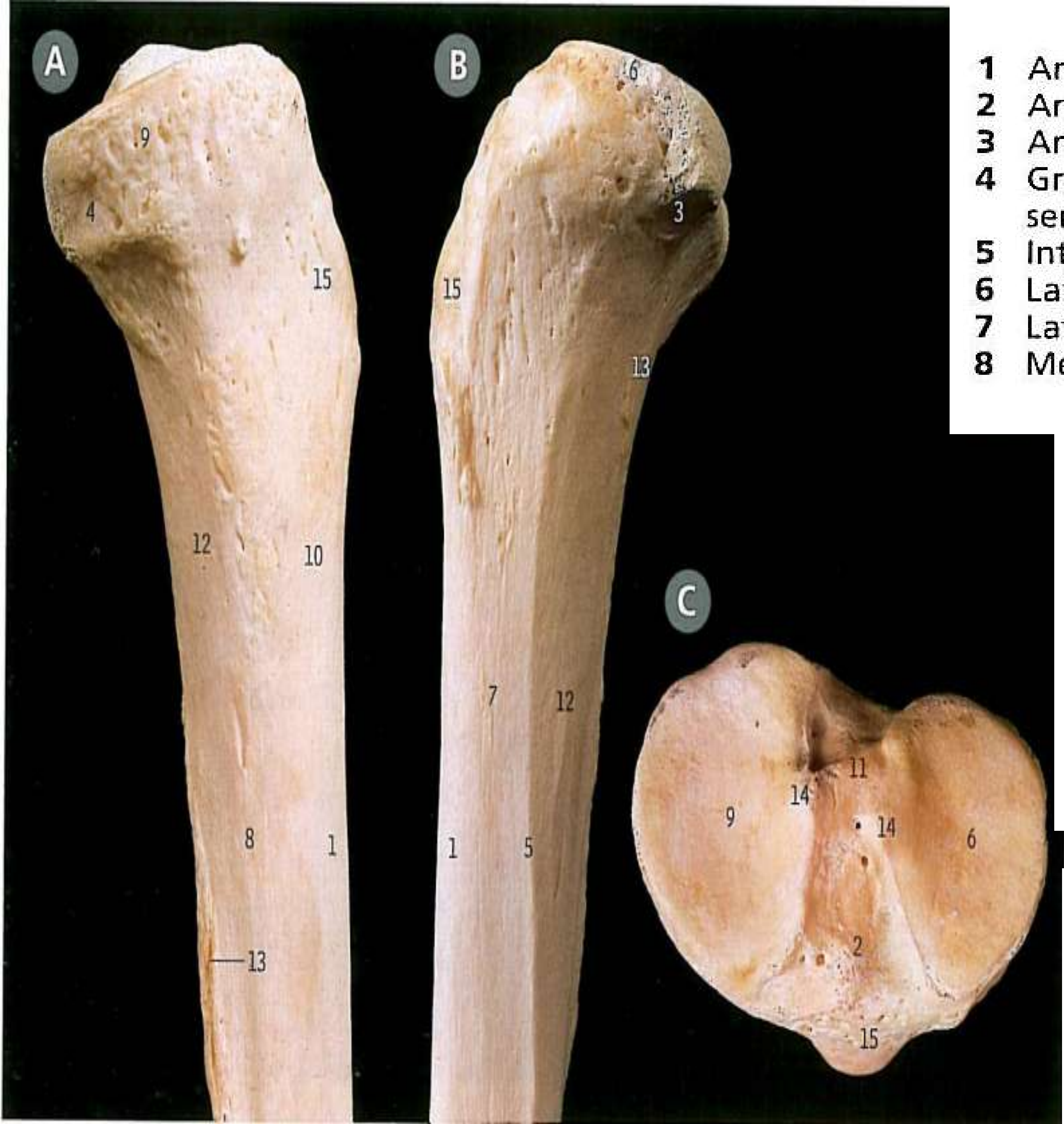
Ⓐ from the front

Ⓑ from behind

8	Semimembranosus
9	Semitendinosus
10	Soleus
11	Tibial collateral ligament
12	Tibialis anterior
13	Tibialis posterior
14	Vastus medialis

1	Flexor digitorum longus
2	Gracilis
3	Iliotibial tract
4	Patellar ligament
5	Popliteus
6	Posterior cruciate ligament
7	Sartorius

Blue lines = epiphysial lines; green line = capsular attachment of knee joint; pale green lines = ligament attachments

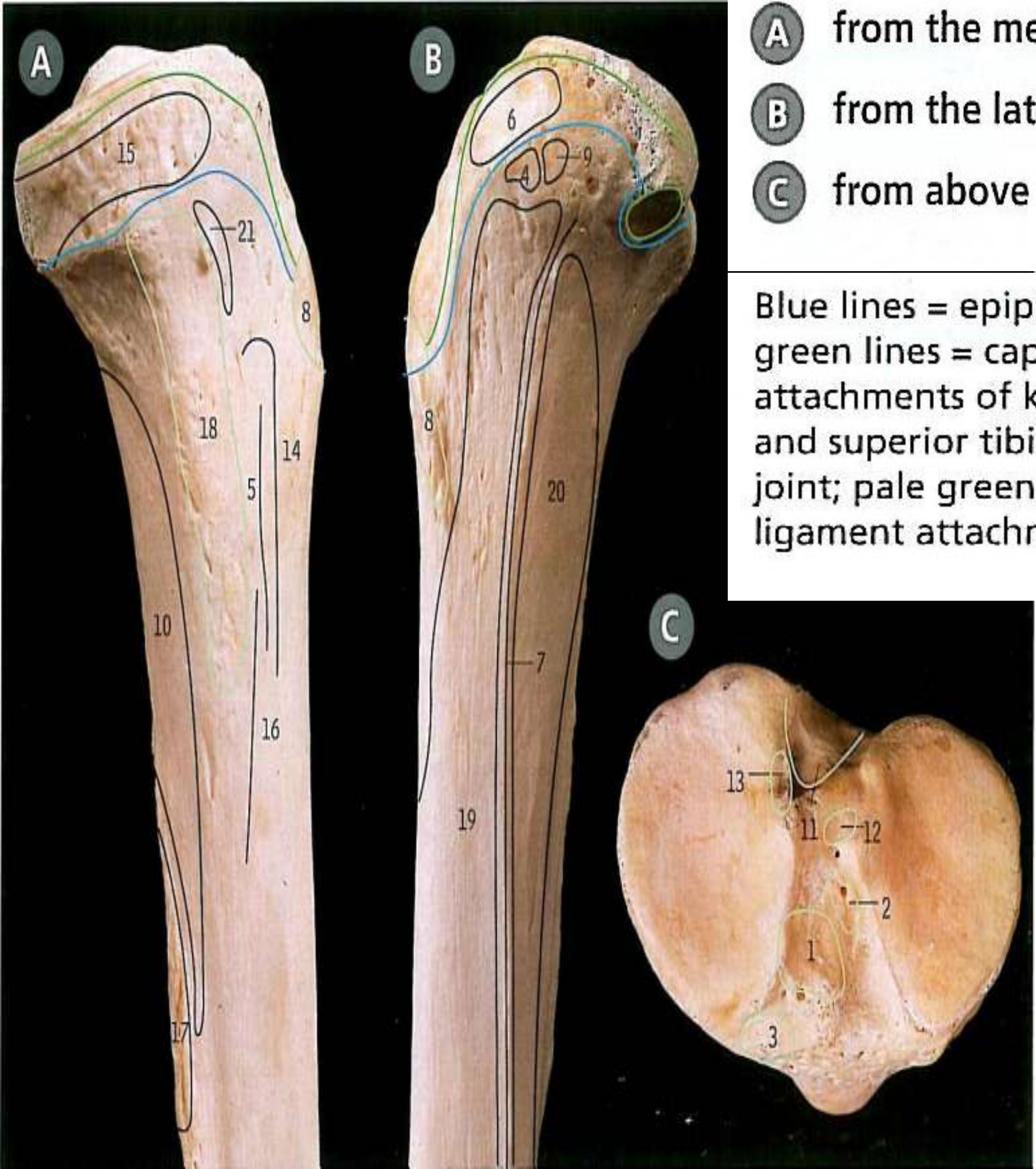

A
9
4
15
12
10
8
1
13
B
6
3
15
13
7
12
1
5
C
11
14
9
14
6
2
15

1	Anterior border
2	Anterior intercondylar area
3	Articular facet for fibula
4	Groove for semimembranosus
5	Interosseous border
6	Lateral condyle
7	Lateral surface
8	Medial border
9	Medial condyle
10	Medial surface
11	Posterior intercondylar area
12	Posterior surface
13	Soleal line
14	Tubercles of intercondylar eminence
15	Tuberosity

A from the medial side

B from the lateral side

C from above



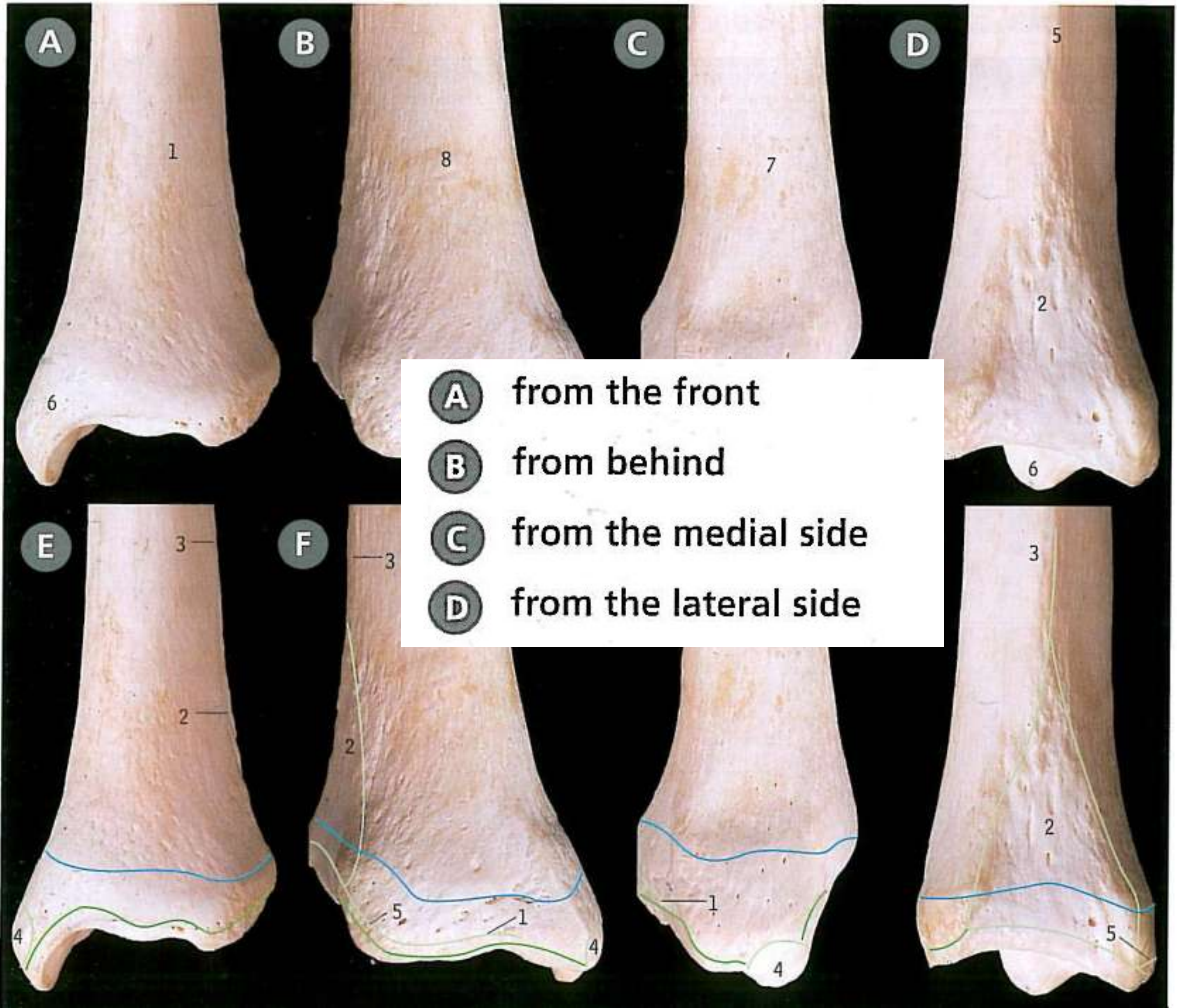
A from the medial side

B from the lateral side

C from above

Blue lines = epiphysial line green lines = capsular attachments of knee joint and superior tibiofibular joint; pale green lines = ligament attachments

1 Anterior cruciate ligament
2 Anterior horn of lateral meniscus
3 Anterior horn of medial meniscus
4 Extensor digitorum longus
5 Gracilis
6 Iliotibial tract
7 Interosseous membrane
8 Patellar ligament
9 Peroneus longus
10 Popliteus
11 Posterior cruciate ligament
12 Posterior horn of lateral meniscus
13 Posterior horn of medial meniscus
14 Sartorius
15 Semimembranosus
16 Semitendinosus
17 Soleus
18 Tibial collateral ligament
19 Tibialis anterior
20 Tibialis posterior
21 Vastus medialis


A
1
6
B
8
C
7
D
5
2
6
E
3
2
4
F
3
2
5
1
4
1
4
3
2
5

A from the front

B from behind

C from the medial side

D from the lateral side

Left tibia *lower end*

- Ⓐ from the front
- Ⓑ from behind
- Ⓒ from the medial side
- Ⓓ from the lateral side

1 Anterior surface
2 Fibular notch
3 Groove for flexor hallucis longus
4 Groove for tibialis posterior
5 Interosseous border
6 Medial malleolus
7 Medial surface
8 Posterior surface

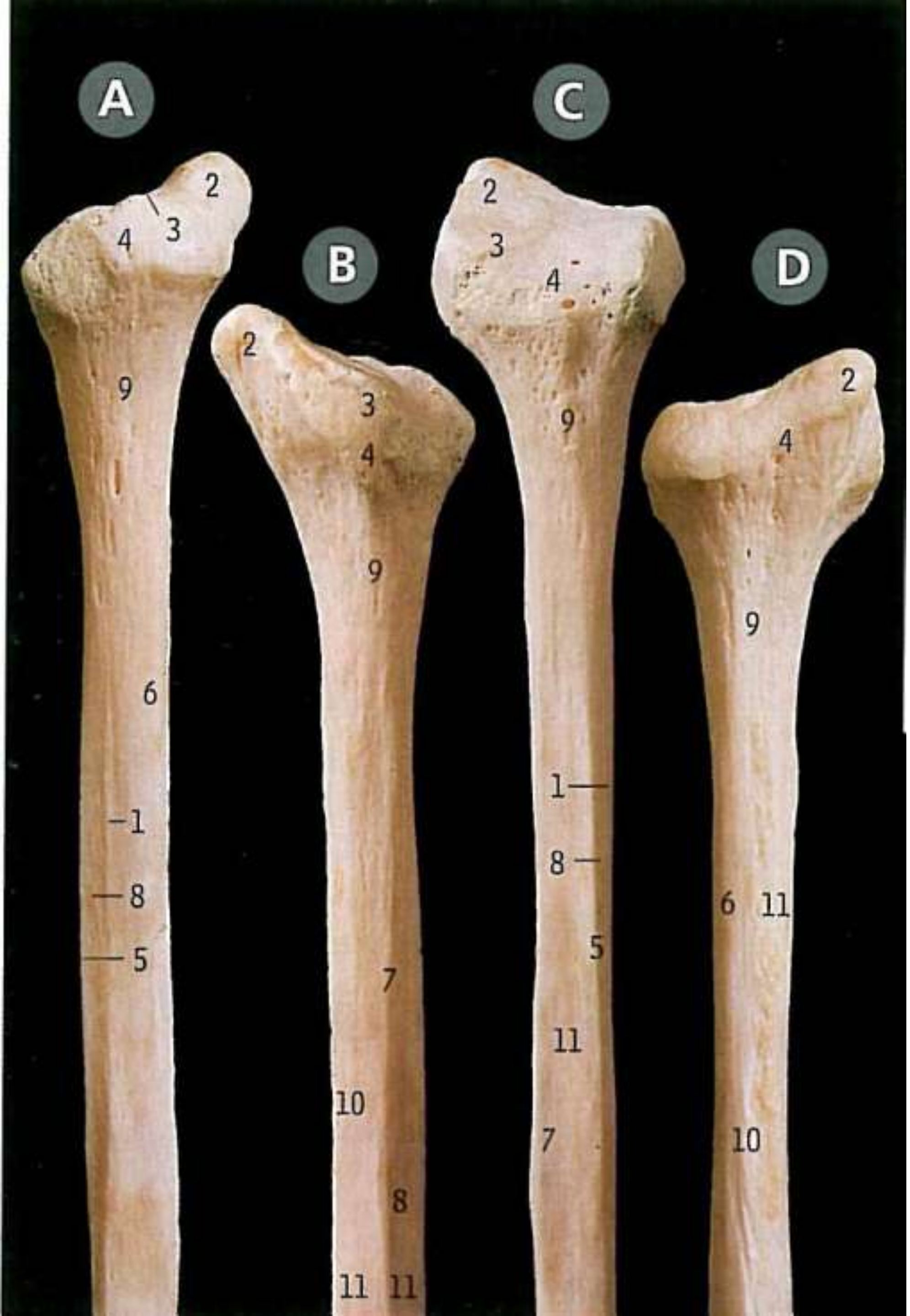
الدكتور ركز على ال
Knee joint
والمكان الذي يمسك فيه

Left tibia *attachments, lower end*

- Ⓔ from the front
- Ⓕ from behind
- Ⓖ from the medial side
- Ⓗ from the lateral side

Blue line = epiphysial line; green line = capsular attachment of ankle joint; pale green lines = ligament attachments

1 Inferior transverse ligament
2 Interosseous ligament
3 Interosseous membrane
4 Medial collateral ligament
5 Posterior tibiofibular ligament


A
2
3
4
9
6
1
8
5
B
2
3
4
9
7
10
8
11
11
C
2
3
4
9
1
8
5
11
7
D
2
4
9
6
11
10

Ⓐ from the front

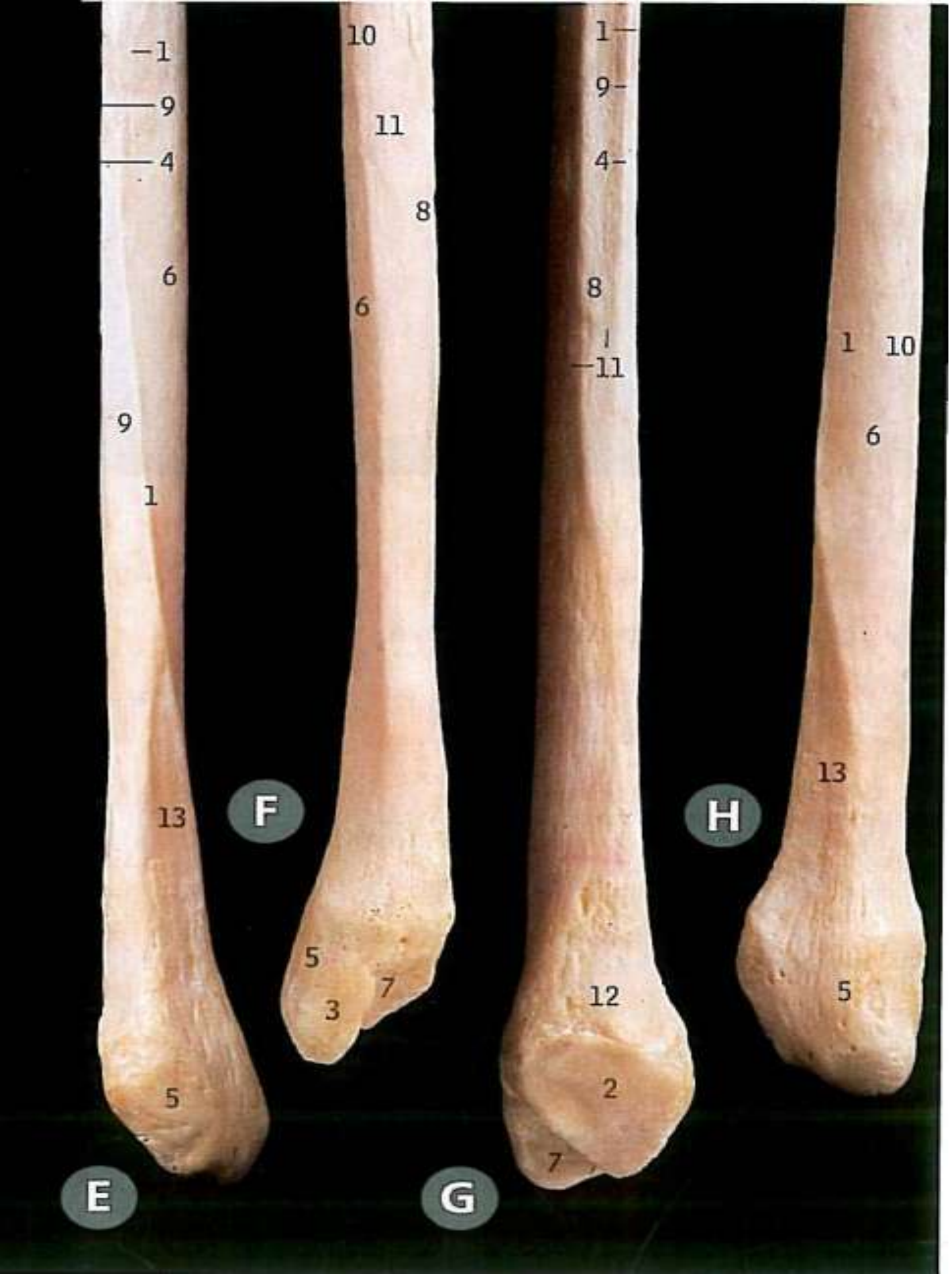
Ⓑ from behind

1 Anterior border
2 Apex (styloid process)
3 Articular facet on upper surface
4 Head
5 Interosseous border

Ⓒ from the medial side

Ⓓ from the lateral side

6 Lateral surface
7 Medial crest
8 Medial surface
9 Neck
10 Posterior border
11 Posterior surface


1
9
4
6
9
1
13
5
E
10
11
8
6
F
5
3
7
1
9
4
8
1
11
12
2
7
G
1
10
6
13
H
5

Left fibula *lower end*

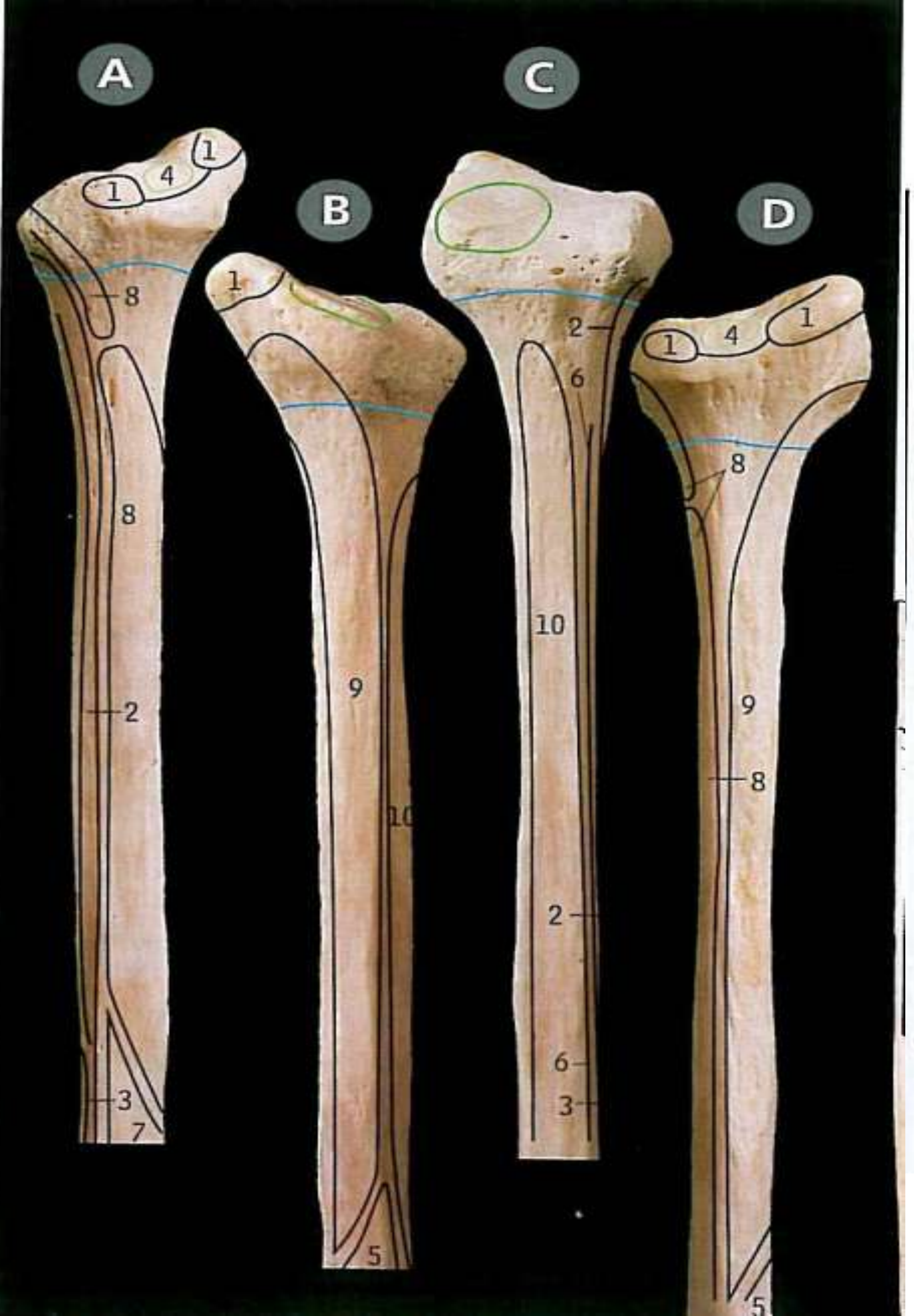
E from the front

F from behind

G from the medial side

H from the lateral side

1	Anterior border
2	Articular surface of lateral malleolus
3	Groove for peroneus brevis
4	Interosseous border
5	Lateral malleolus
6	Lateral surface
7	Malleolar fossa
8	Medial crest
9	Medial surface
10	Posterior border
11	Posterior surface
12	Surface for interosseous ligament
13	Triangular subcutaneous area



Left fibula

attachments, upper end

Ⓐ from the front

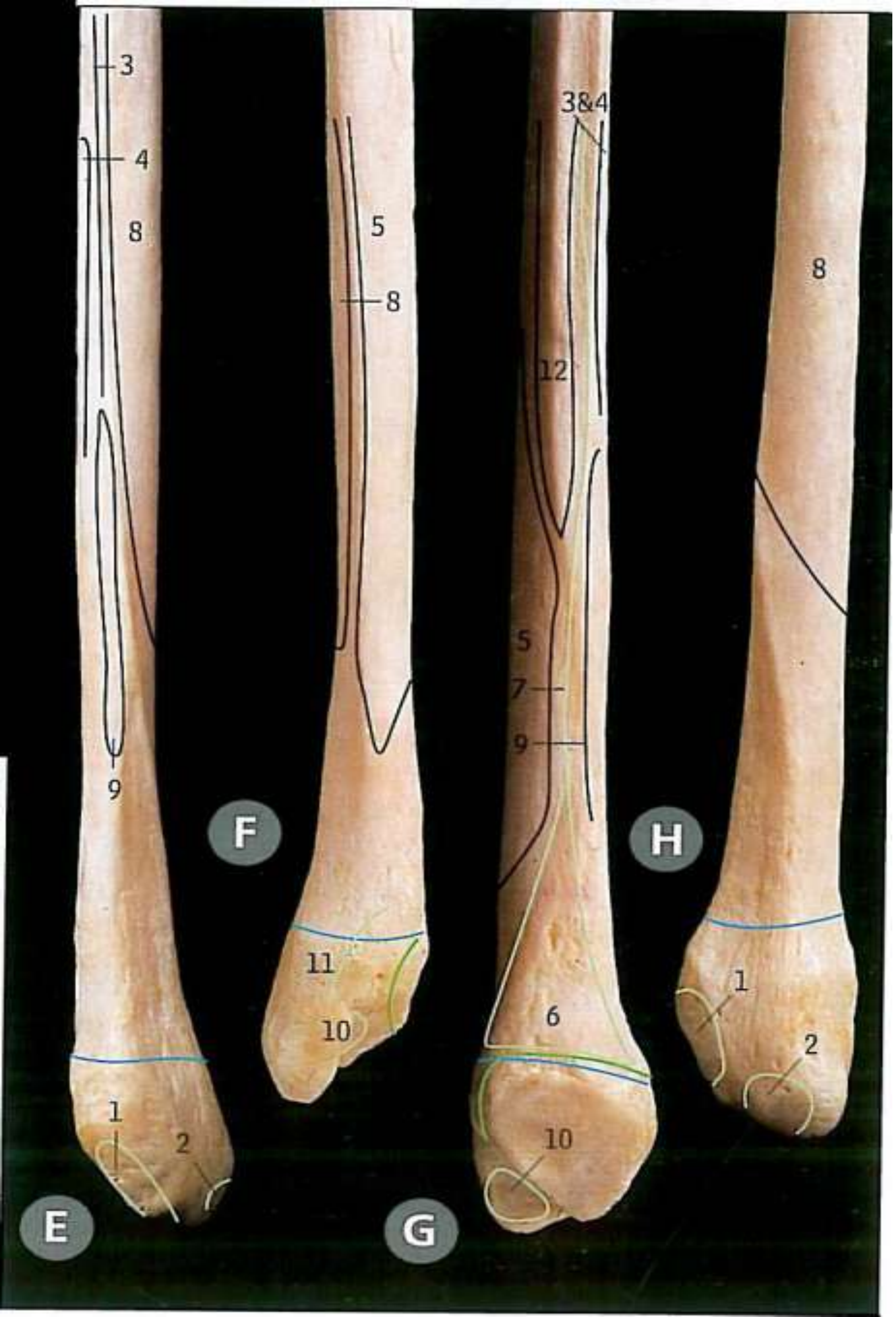
Ⓑ from behind

Ⓒ from the medial side

Ⓓ from the lateral side

Blue line = epiphysial line; green line = capsular attachment of superior tibiofibular joint; pale green lines = ligament attachments

1 Biceps
2 Extensor digitorum longus
3 Extensor hallucis longus
4 Fibular collateral ligament
5 Flexor hallucis longus
6 Interosseous membrane
7 Peroneus brevis
8 Peroneus longus
9 Soleus
10 Tibialis posterior



Left fibula

attachments, lower end

E from the front

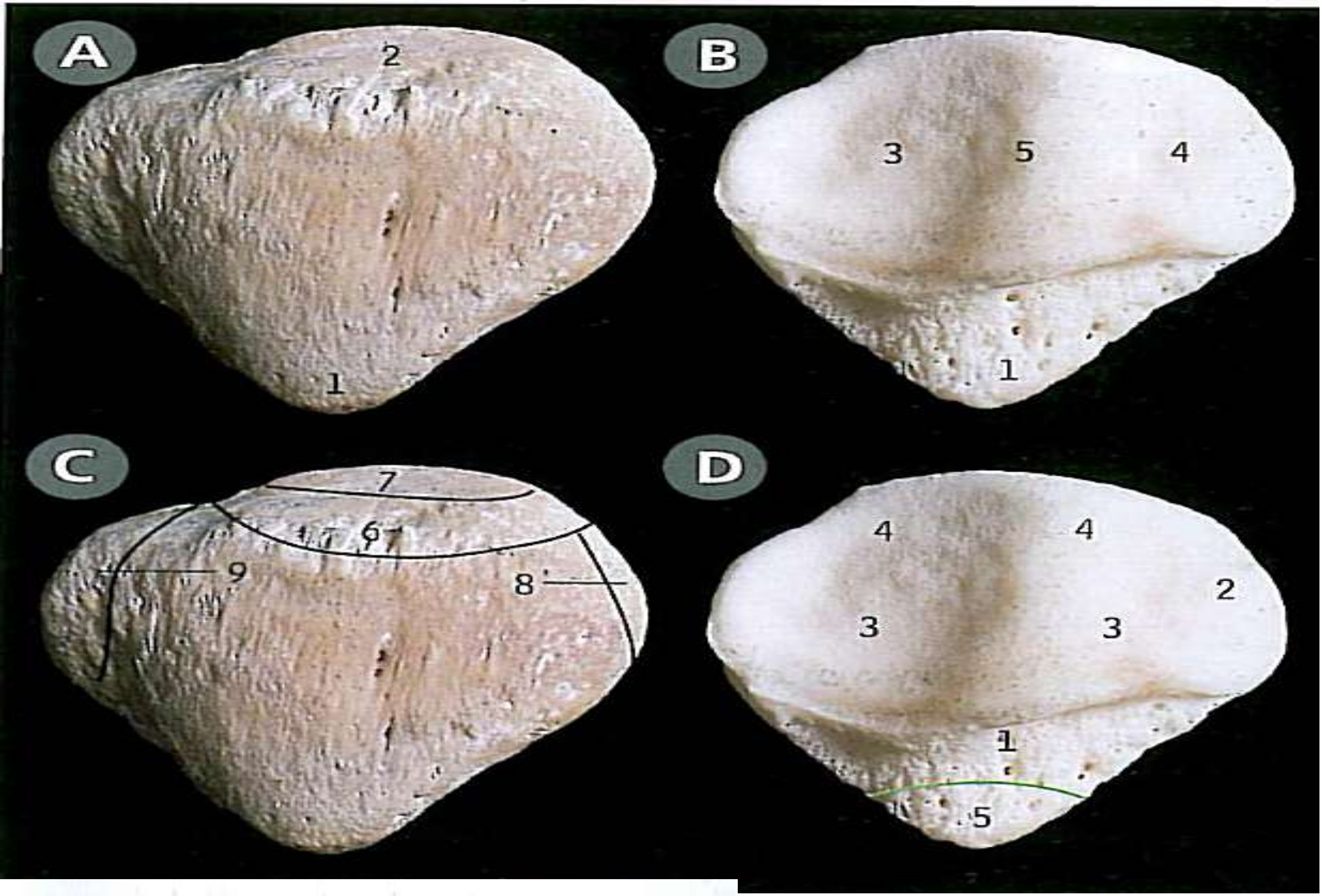
F from behind

G from the medial side

H from the lateral side

Blue line = epiphysial line; green line = capsular attachment of ankle joint; pale green lines = ligament attachments

1 Anterior talofibular ligament
2 Calcaneofibular ligament
3 Extensor digitorum longus
4 Extensor hallucis longus
5 Flexor hallucis longus
6 Interosseous ligament
7 Interosseous membrane
8 Peroneus brevis
9 Peroneus tertius
10 Posterior talofibular ligament
11 Posterior tibiofibular ligament
12 Tibialis posterior


A
2
1
B
3
5
4
1
C
7
6
9
8
D
4
4
2
3
3
1
5

Left patella

Ⓐ anterior surface Ⓑ articular (posterior) surface

1 Apex
2 Base
3 Facet for lateral condyle of femur
4 Facet for medial condyle of femur
5 Vertical ridge

patella

TYPE: largest sesamoid bone in body

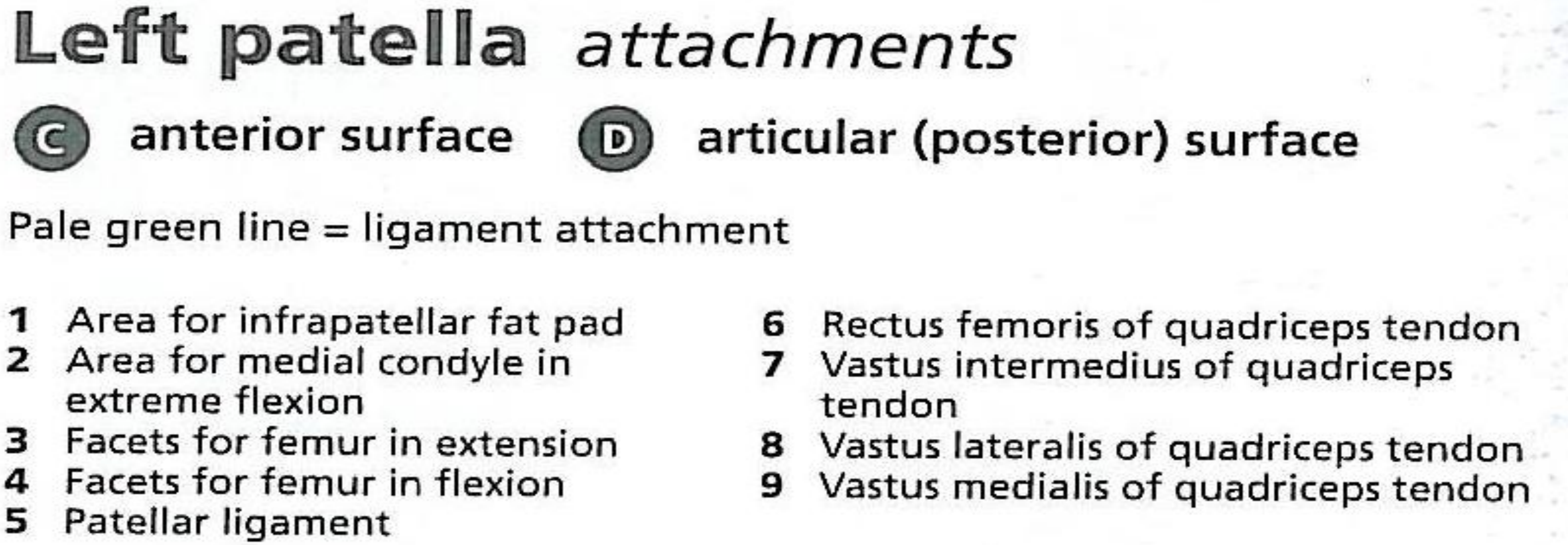
POSITION : infront of the knee inside the quadriceps tendon

IDENTIFY RIGHT OR LEFT:

1)Base is directed upward& apex downward

2)The anterior surface is rough the posterior surface is smooth and has 2 articular facets

3)The lateral articular facet larger than medial



Left patella *attachments*

Ⓒ **anterior surface** Ⓓ **articular (posterior) surface**

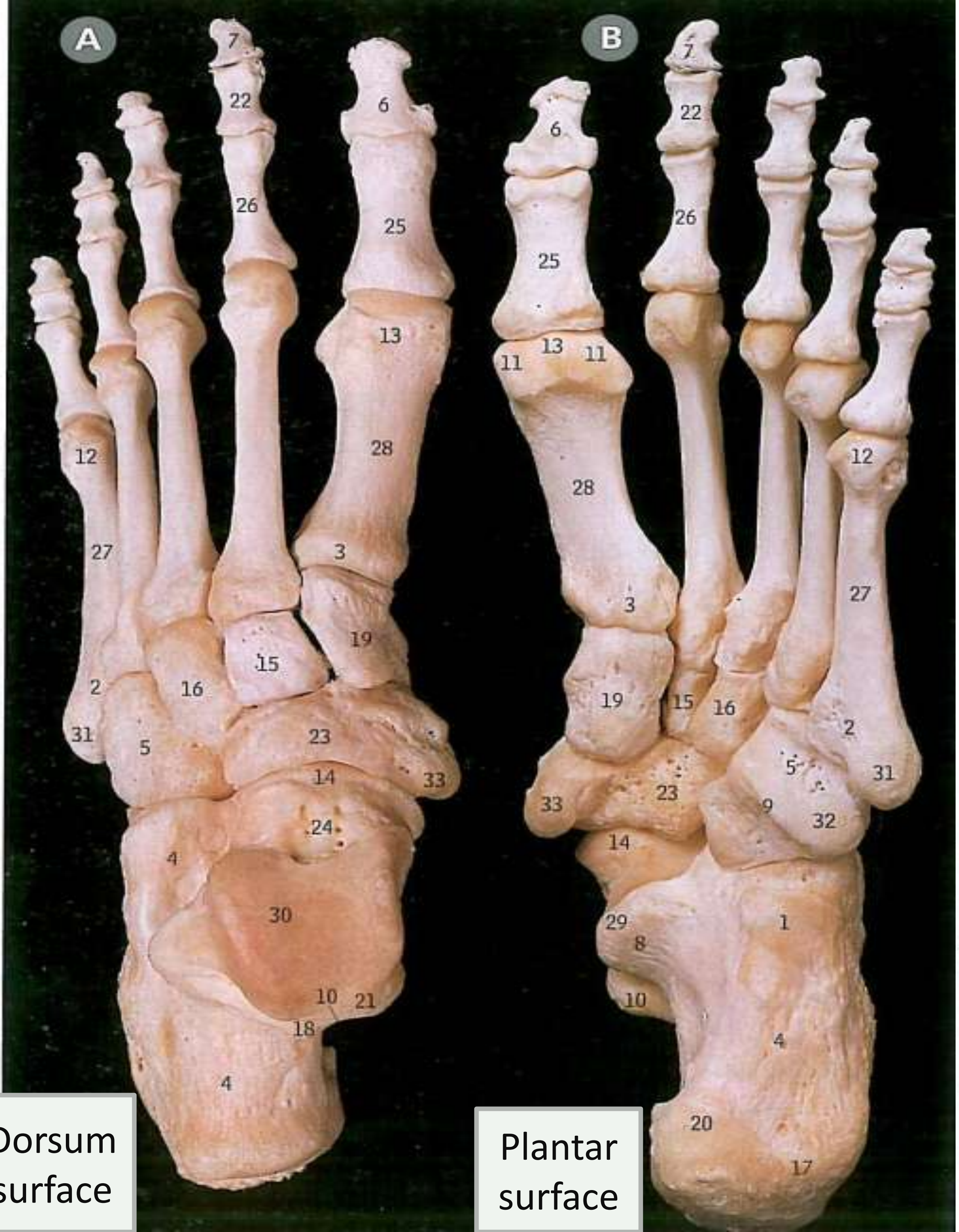
Pale green line = ligament attachment

1 Area for infrapatellar fat pad
2 Area for medial condyle in extreme flexion
3 Facets for femur in extension
4 Facets for femur in flexion
5 Patellar ligament
6 Rectus femoris of quadriceps tendon
7 Vastus intermedius of quadriceps tendon
8 Vastus lateralis of quadriceps tendon
9 Vastus medialis of quadriceps tendon

Skeleton of the foot

- **TARSUS BONE(7BONE):**

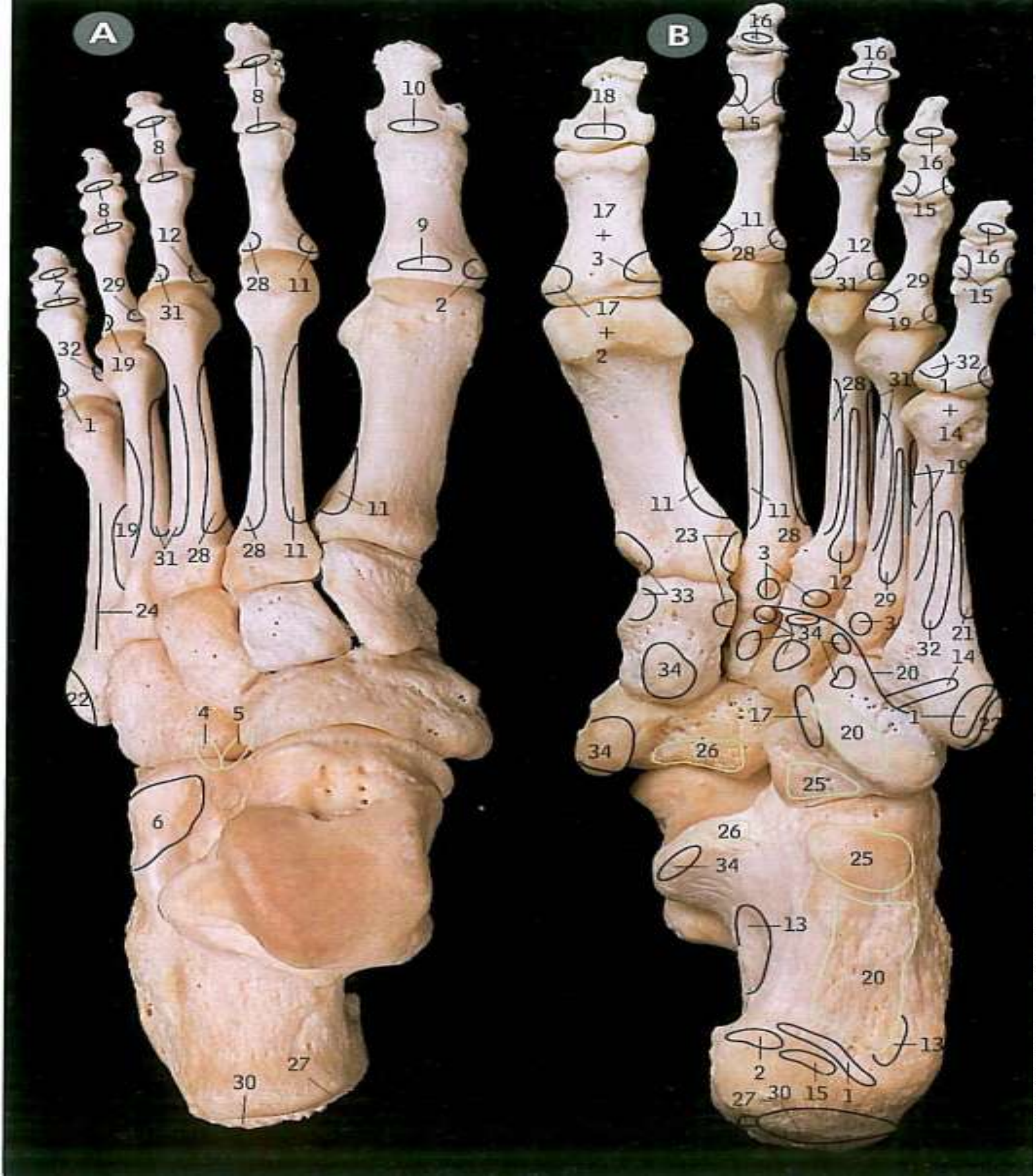
1)Talus
2)Calcaneus
3)Cuboid
4)Navicular
5)3 cuniform bones :medial/lateral/intermed
تهاني كلت كباب ونيفة ٣كتاكيت.
METATARSAL :5 short long bones
PHALANGES:2 for big toe and
3 for lat 4 toes


A
7
22
26
6
25
13
28
12
27
3
19
15
2
16
31
5
23
14
33
24
4
30
10
21
18
4
B
7
22
6
26
25
11
13
11
28
12
27
3
19
15
16
2
5
31
33
23
9
32
14
29
1
8
10
4
20
17

Dorsum surface

Plantar surface

1	Anterior tubercle of calcaneus
2	Base of fifth metatarsal
3	Base of first metatarsal
4	Calcaneus
5	Cuboid
6	Distal phalanx of great toe
7	Distal phalanx of second toe
8	Groove on calcaneus for flexor hallucis longus
9	Groove on cuboid for peroneus longus
10	Groove on talus for flexor hallucis longus
11	Grooves for sesamoid bones in flexor hallucis brevis
12	Head of fifth metatarsal
13	Head of first metatarsal
14	Head of talus
15	Intermediate cuneiform
16	Lateral cuneiform
17	Lateral process of calcaneus
18	Lateral tubercle of talus
19	Medial cuneiform
20	Medial process of calcaneus
21	Medial tubercle of talus
22	Middle phalanx of second toe
23	Navicular
24	Neck of talus
25	Proximal phalanx of great toe
26	Proximal phalanx of second toe
27	Shaft of fifth metatarsal
28	Shaft of first metatarsal
29	Sustentaculum tali of calcaneus
30	Trochlear surface of body of talus
31	Tuberosity of base of fifth metatarsal
32	Tuberosity of cuboid
33	Tuberosity of navicular


A
10
8
8
8
9
12
29
28
11
2
31
32
19
1
11
19
31
28
28
11
24
22
4
5
6
27
30
B
16
16
18
15
15
16
17
+
3
11
28
12
31
29
15
16
15
17
+
2
19
32
1
+
14
28
31
19
11
11
23
28
3
12
33
29
34
21
32
14
34
20
17
20
1
34
26
25
26
34
25
13
20
2
13
27
30
15
1

1 Abductor digiti minimi
2 Abductor hallucis
3 Adductor hallucis
4 Calcaneocuboid part of bifurcate ligament
5 Calcaneonavicular part of bifurcate ligament
6 Extensor digitorum brevis
7 Extensor digitorum longus
8 Extensor digitorum longus and brevis
9 Extensor hallucis brevis
10 Extensor hallucis longus
11 First dorsal interosseous
12 First plantar interosseous
13 Flexor accessorius
14 Flexor digiti minimi brevis
15 Flexor digitorum brevis
16 Flexor digitorum longus
17 Flexor hallucis brevis
18 Flexor hallucis longus
19 Fourth dorsal interosseous
20 Long plantar ligament
21 Opponens digiti minimi (part of 14)
22 Peroneus brevis
23 Peroneus longus
24 Peroneus tertius
25 Plantar calcaneocuboid (short plantar) ligament
26 Plantar calcaneonavicular (spring) ligament
27 Plantaris
28 Second dorsal interosseous
29 Second plantar interosseous
30 Tendo calcaneus (Achilles tendon)
31 Third dorsal interosseous
32 Third plantar interosseous
33 Tibialis anterior
34 Tibialis posterior

Muscles of the lower limb

Muscles of the of iliac region

1)Psoas major muscle(supply by lumbar plexus L1 2 3)

2)Iliacus muscle (supply by femoral nerve)

Muscles of the front of the thigh

1)sartorius(supply by femoral nerve)

2)Quadriceps muscle(Supply by femral nerve):

a)Rectus femoris b)vastus intermedius

c)Vastus lateralis d)vastus medialis

Muscles of medial side of thigh: •

1)adductor longus

2)adductor brevis

3)adductor magnus

4)pectineus

5)gracilis

All of them supply by obturator nerve

Muscle of gluteal region:

A)tensor fascia lata(supply by sup gluteal nerve)

B)the3 gluteal muscles:

1)gluteal maximus(inf gluteal nervre)

2)gluteal medius 3)gluteal minimus(two muscles by sup gluteal nerve)

C)6lat rotators muscles:

1)piriformis (s1 s2)

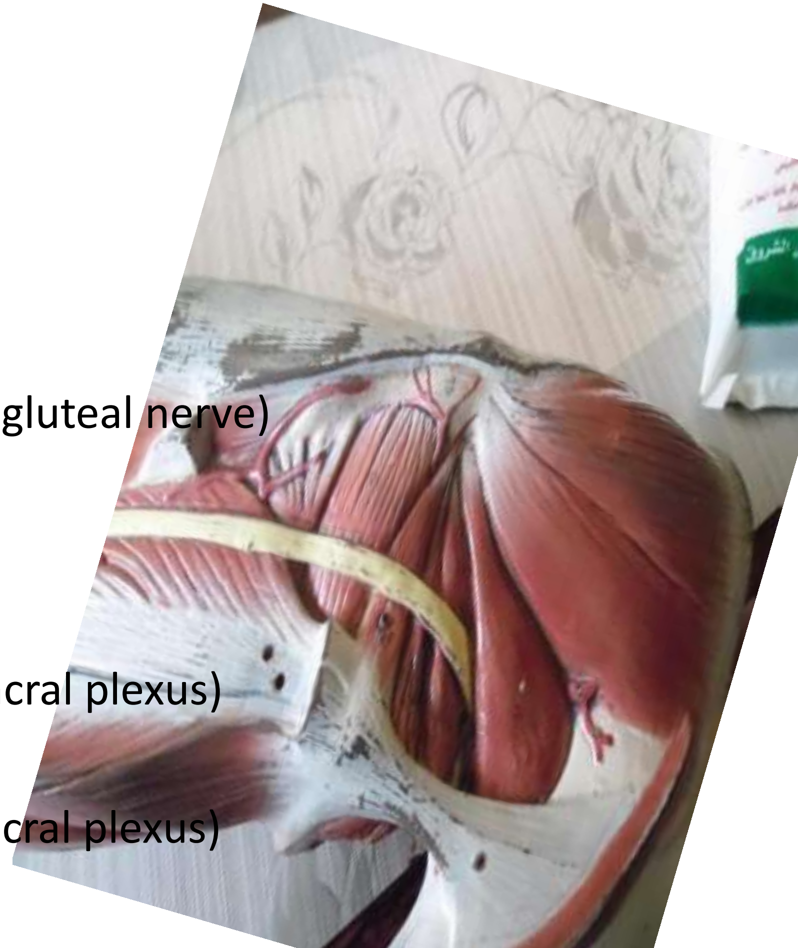
2)superior gemellus(nerve of obturator internus)

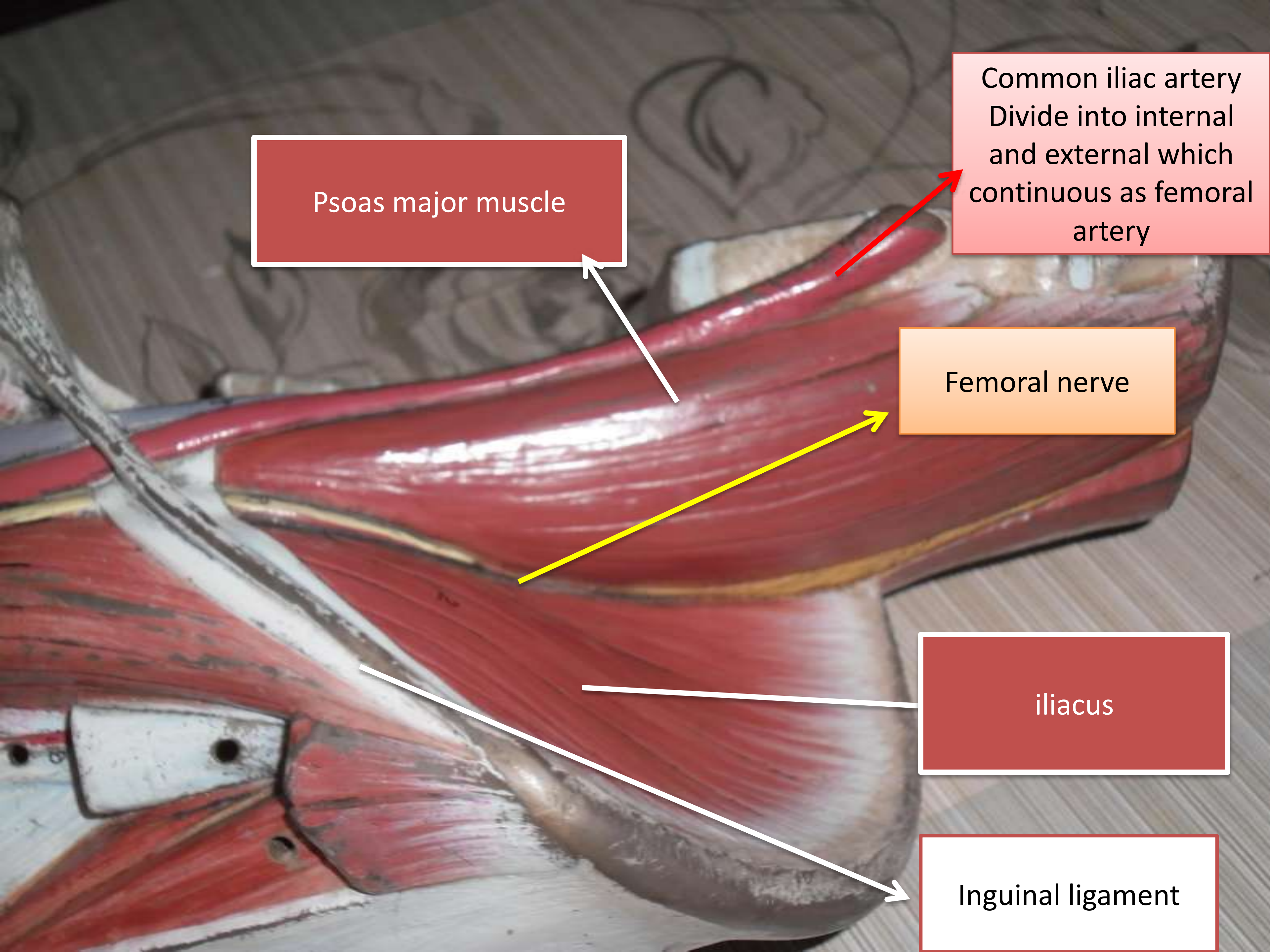
3)obturator internus(nerve to obturator internus from sacral plexus)

4)inferior gemellus(nerve to quadratus femoris)

5)quadratus femoris(nerve to quadratus femoris feom sacral plexus)

6)Obturator externus(obturator nerve)





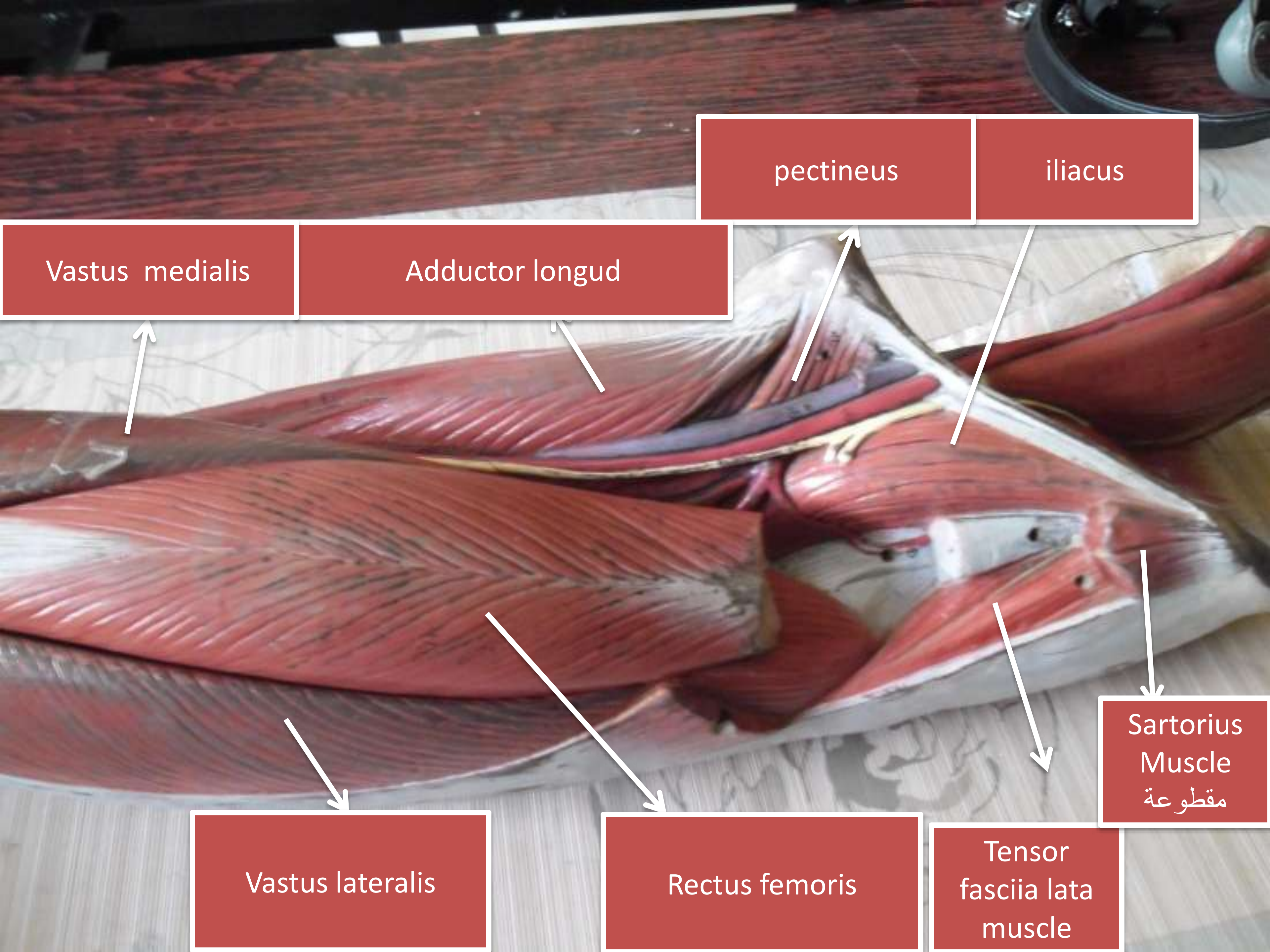
Common iliac artery Divide into internal and external which continuous as femoral artery

Psoas major muscle

Femoral nerve

iliacus

Inguinal ligament



pectineus

iliacus

Vastus medialis

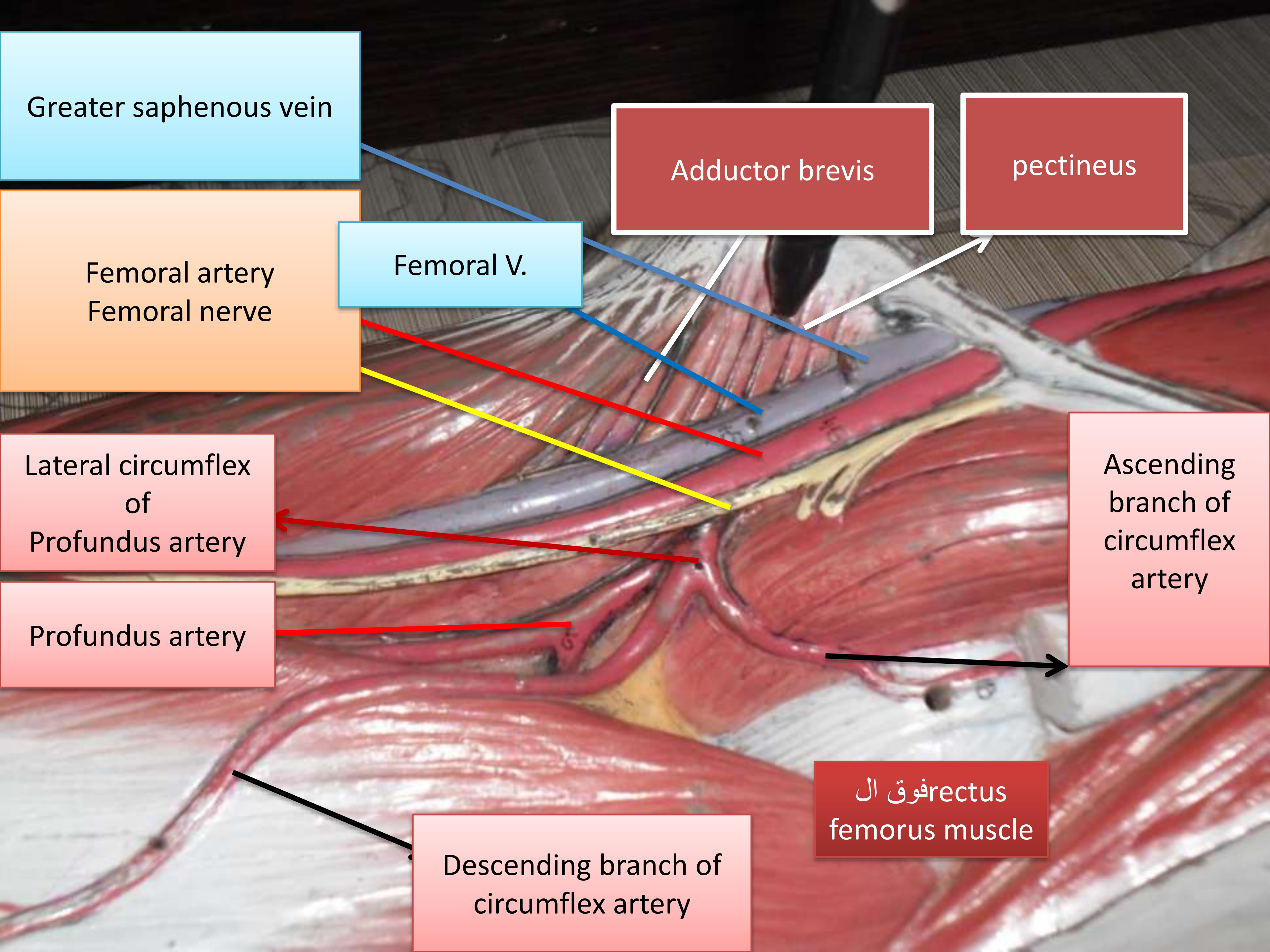
Adductor longud

Sartorius
Muscle
مقطوعة

Vastus lateralis

Rectus femoris

Tensor
fasciia lata
muscle



Greater saphenous vein

Femoral artery
Femoral nerve

Femoral V.

Adductor brevis

pectineus

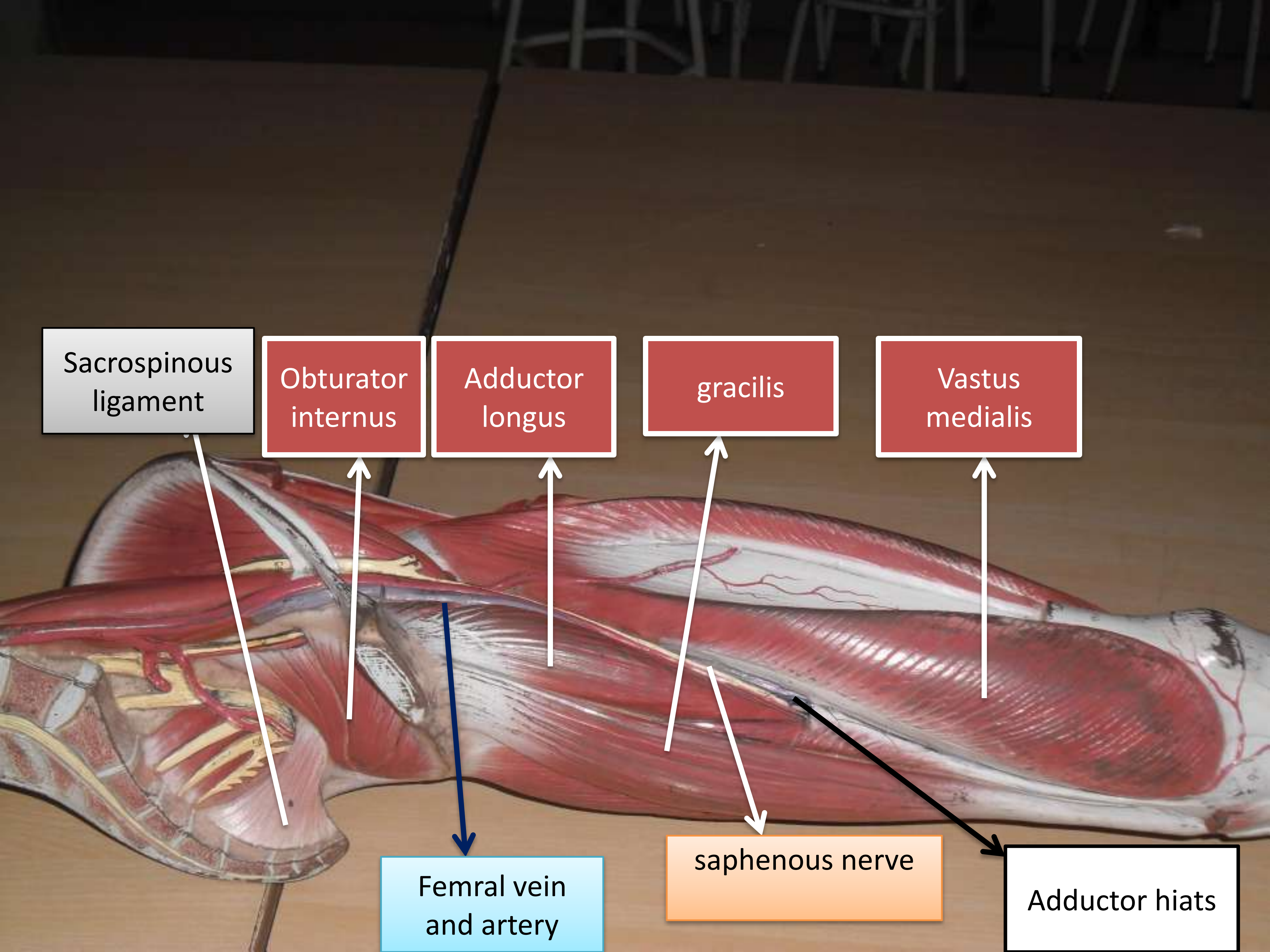
Lateral circumflex of Profundus artery

Profundus artery

Ascending branch of circumflex artery

فوق الrectus femorus muscle

Descending branch of circumflex artery



Sacrospinous ligament

Obturator internus

Adductor longus

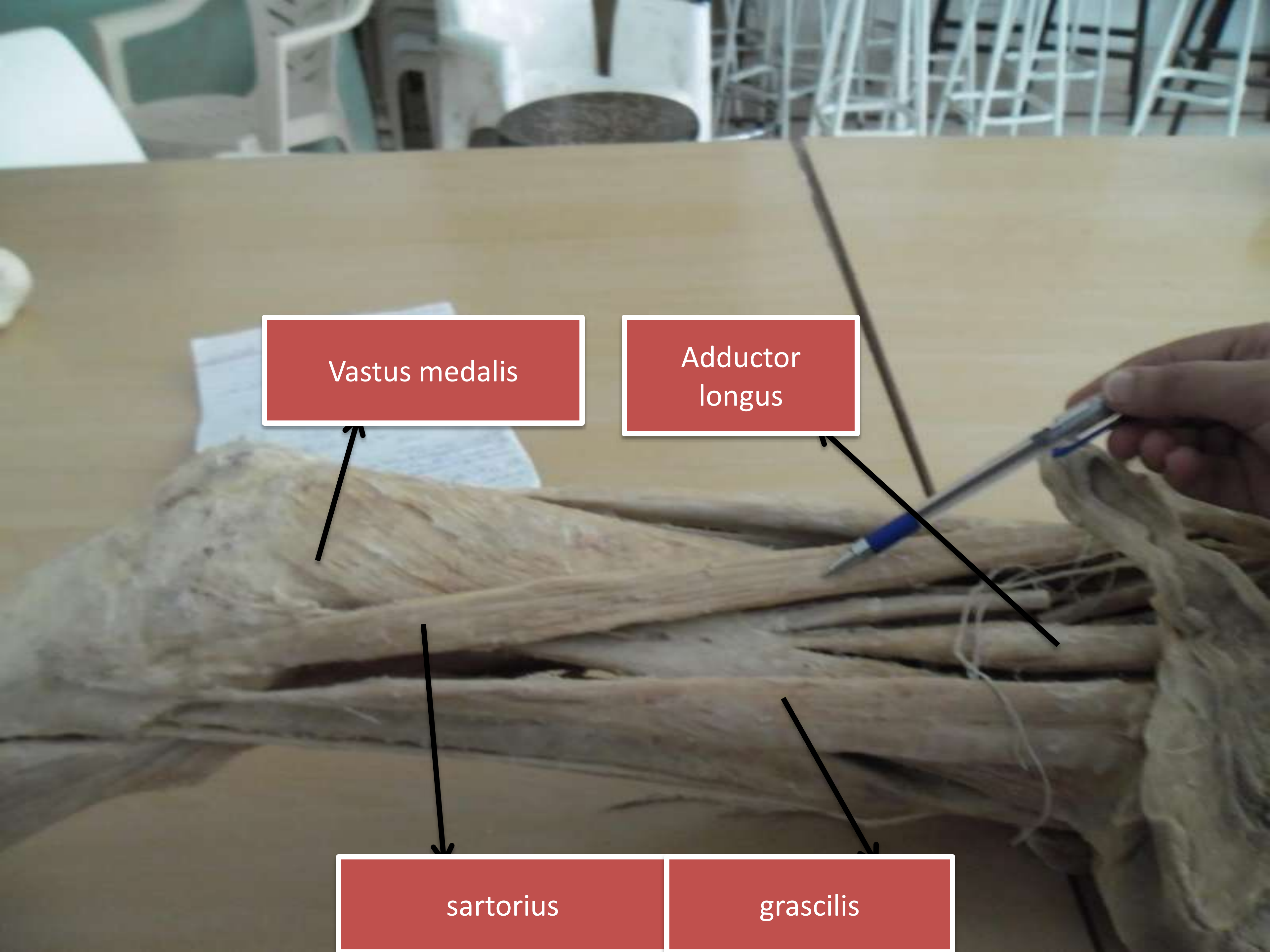
gracilis

Vastus medialis

Femral vein and artery

saphenous nerve

Adductor hiats

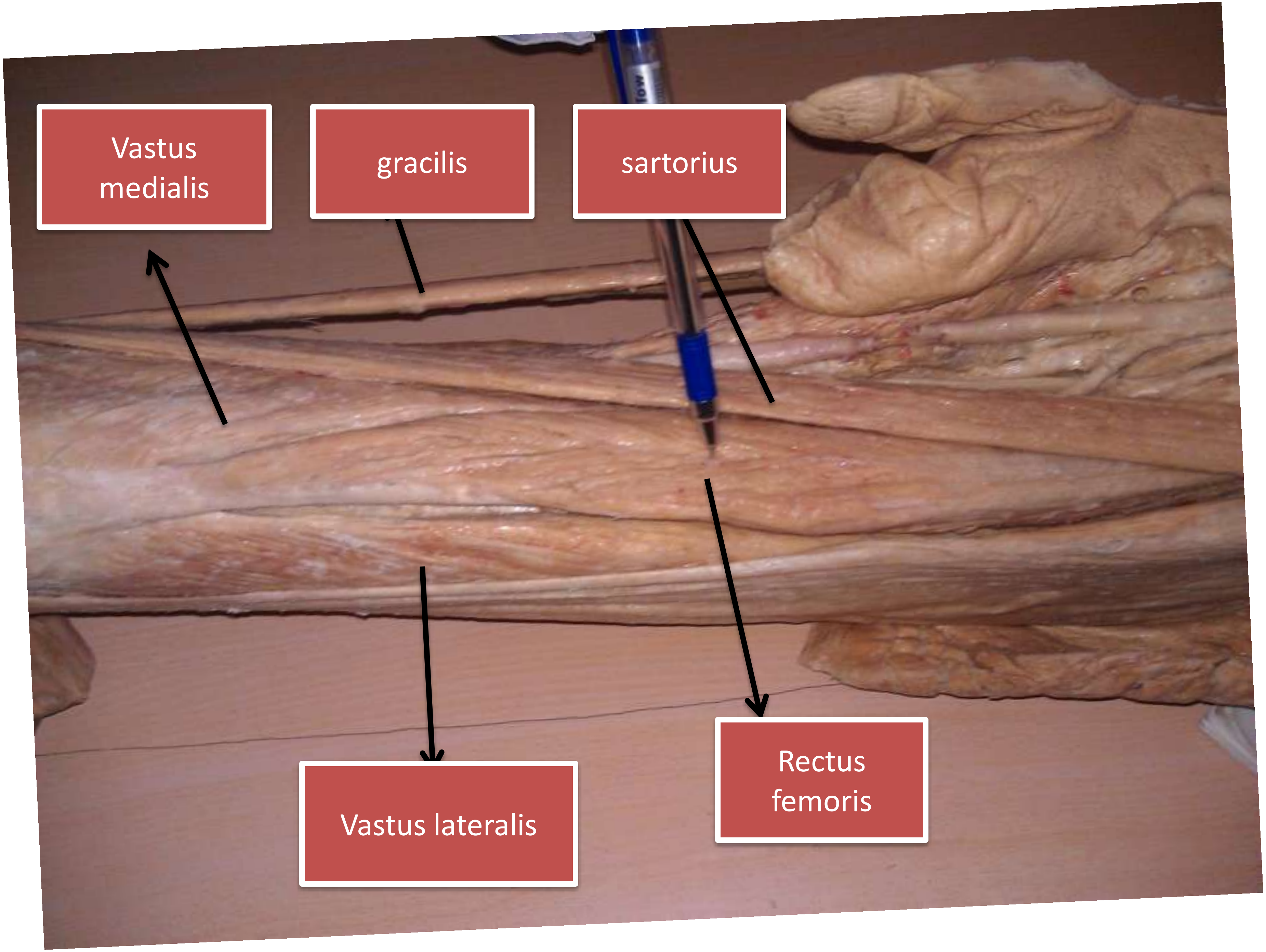


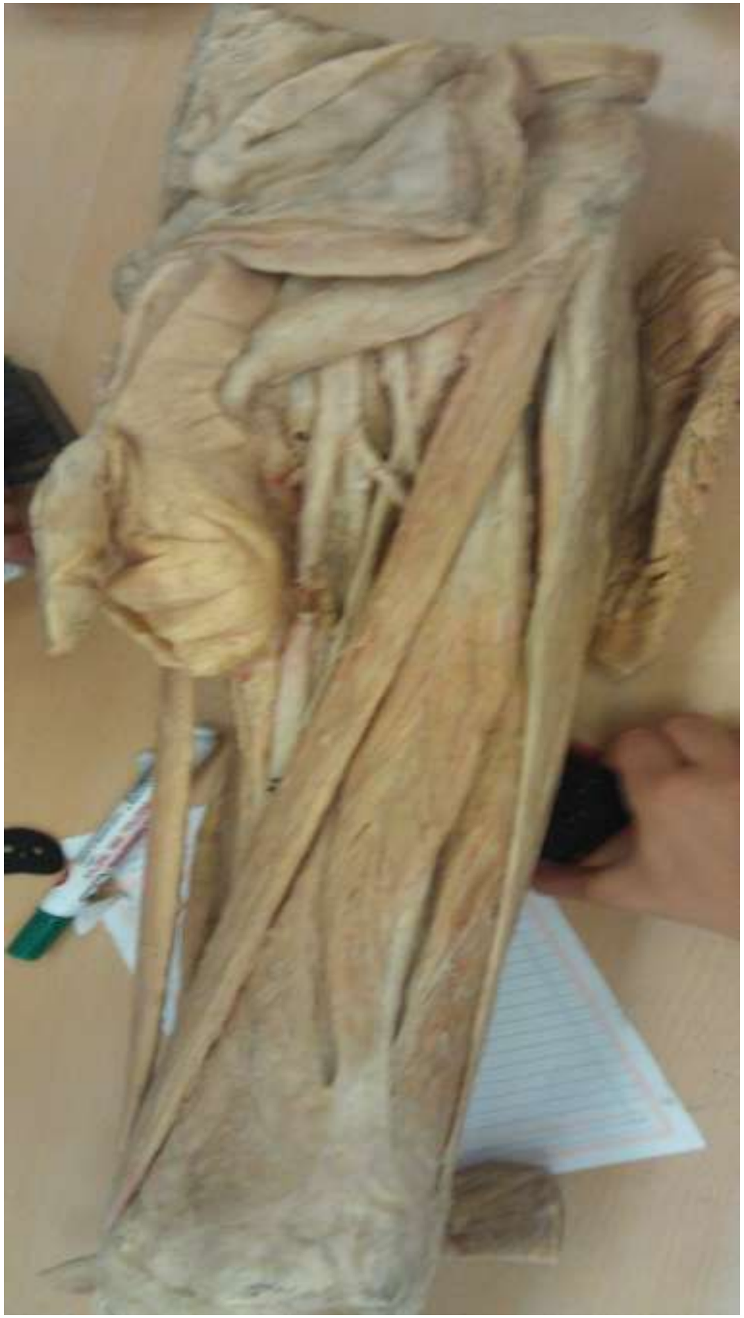
Vastus medalis

Adductor longus

sartorius

grascilis

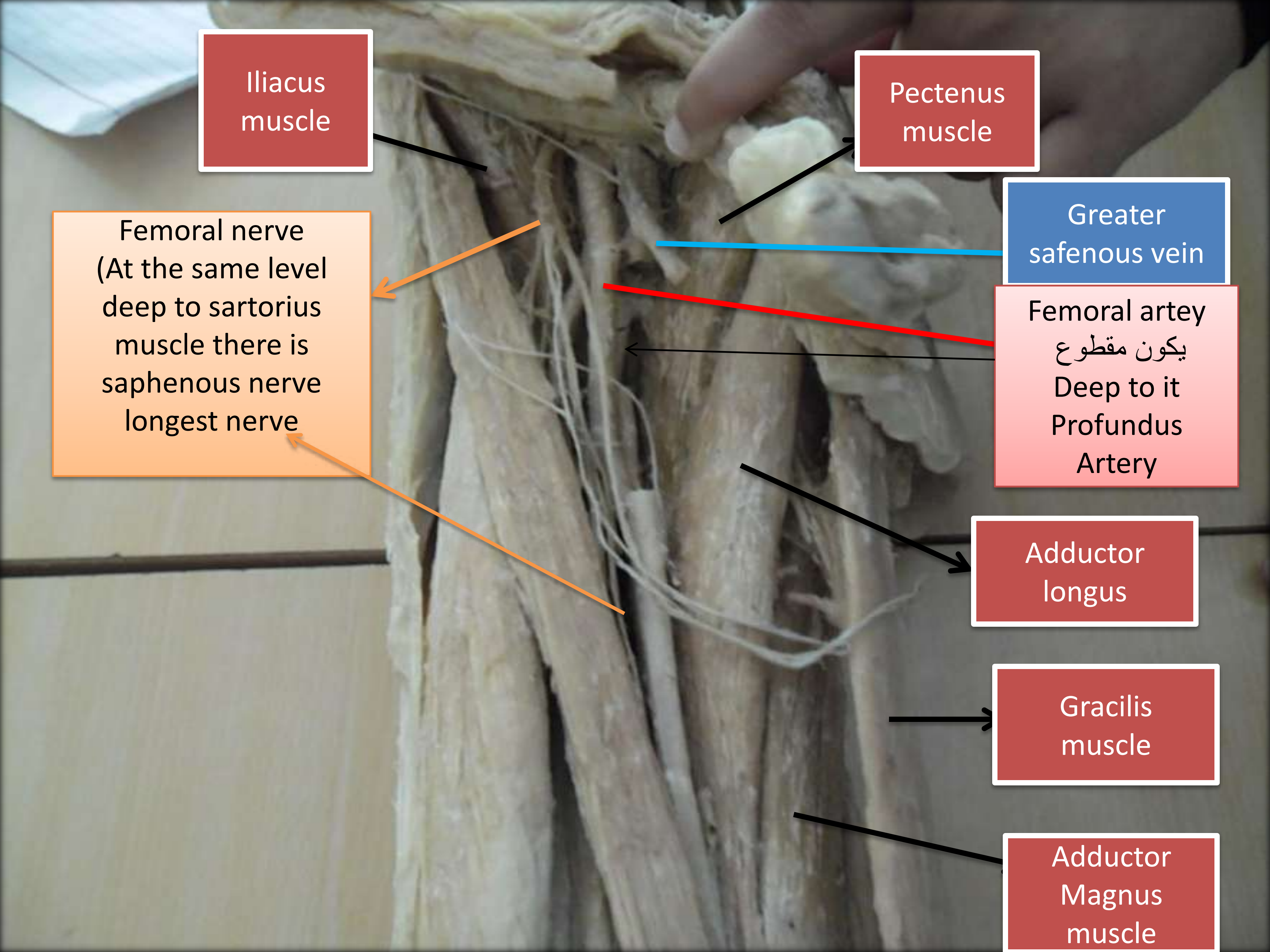

Vastus medialis
gracilis
sartorius
Rectus femoris
Vastus lateralis



Anterior compartment

Of thigh

تكبير الشريحة الأولى



Iliacus muscle

Pectenus muscle

Greater safenous vein

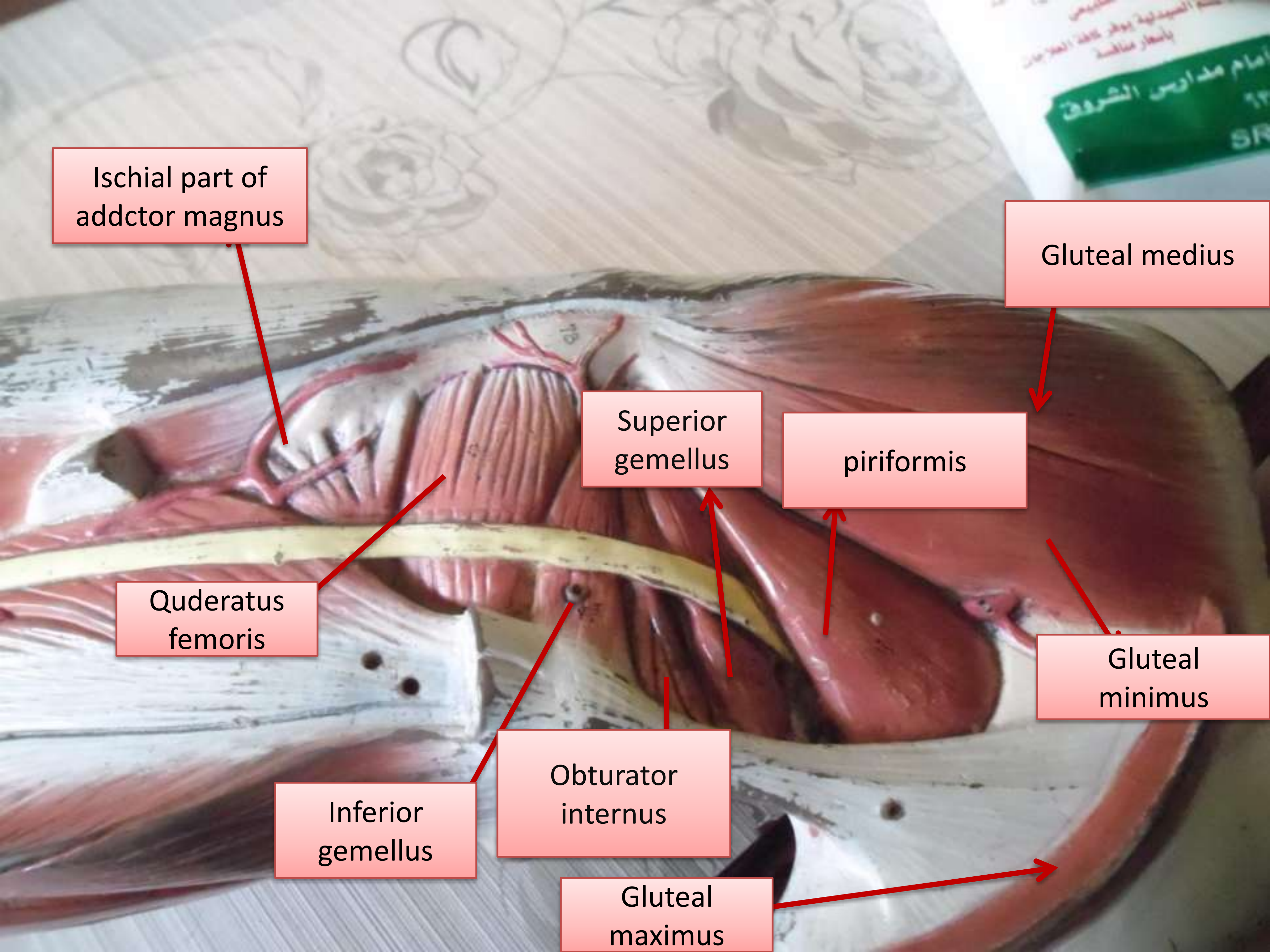
Femoral nerve (At the same level deep to sartorius muscle there is saphenous nerve longest nerve

Femoral artey
يكون مقطوع
Deep to it Profundus Artery

Adductor longus

Gracilis muscle

Adductor Magnus muscle



Ischial part of addctor magnus

Gluteal medius

Superior gemellus

piriformis

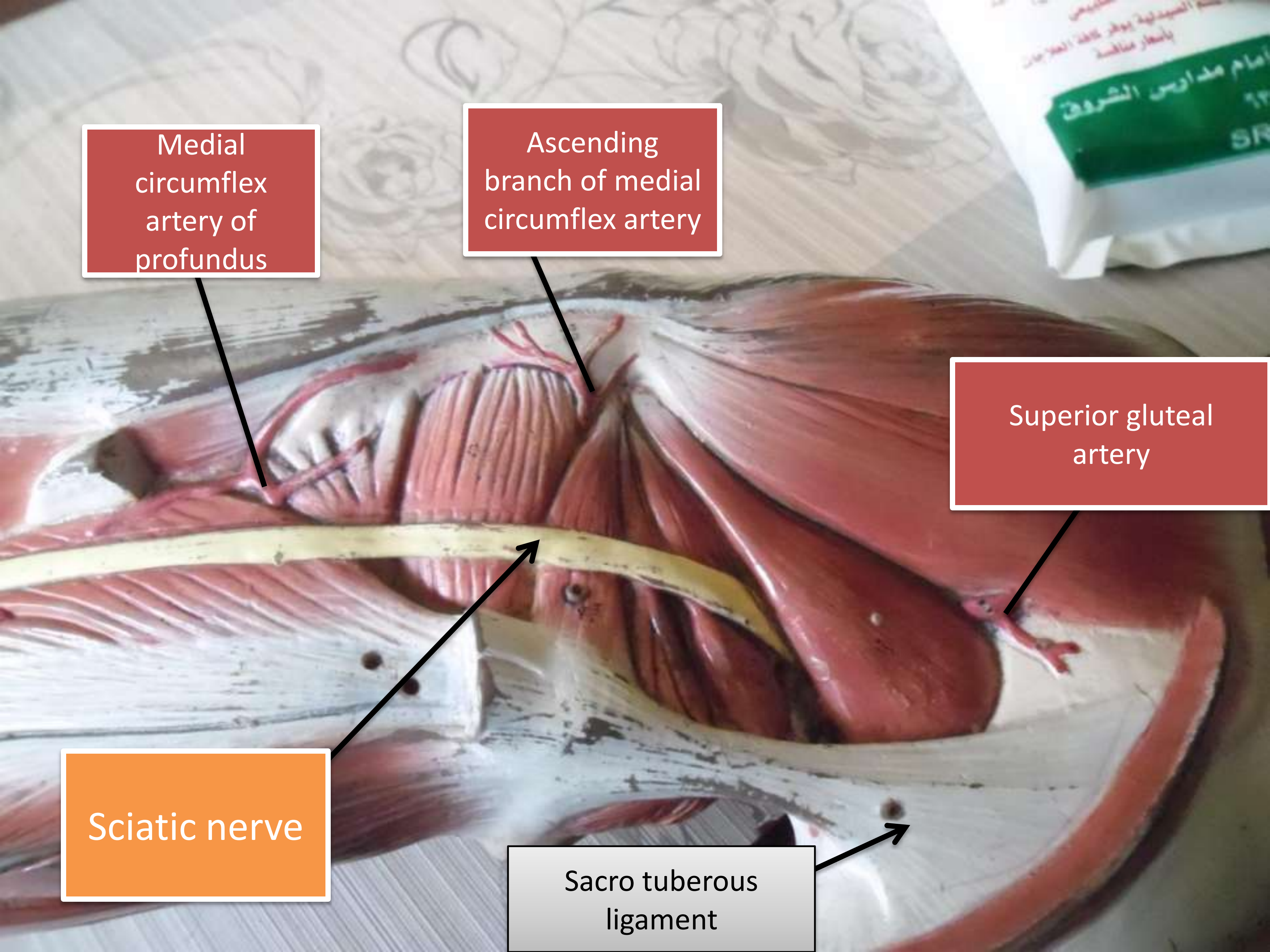
Quderatus femoris

Gluteal minimus

Inferior gemellus

Obturator internus

Gluteal maximus



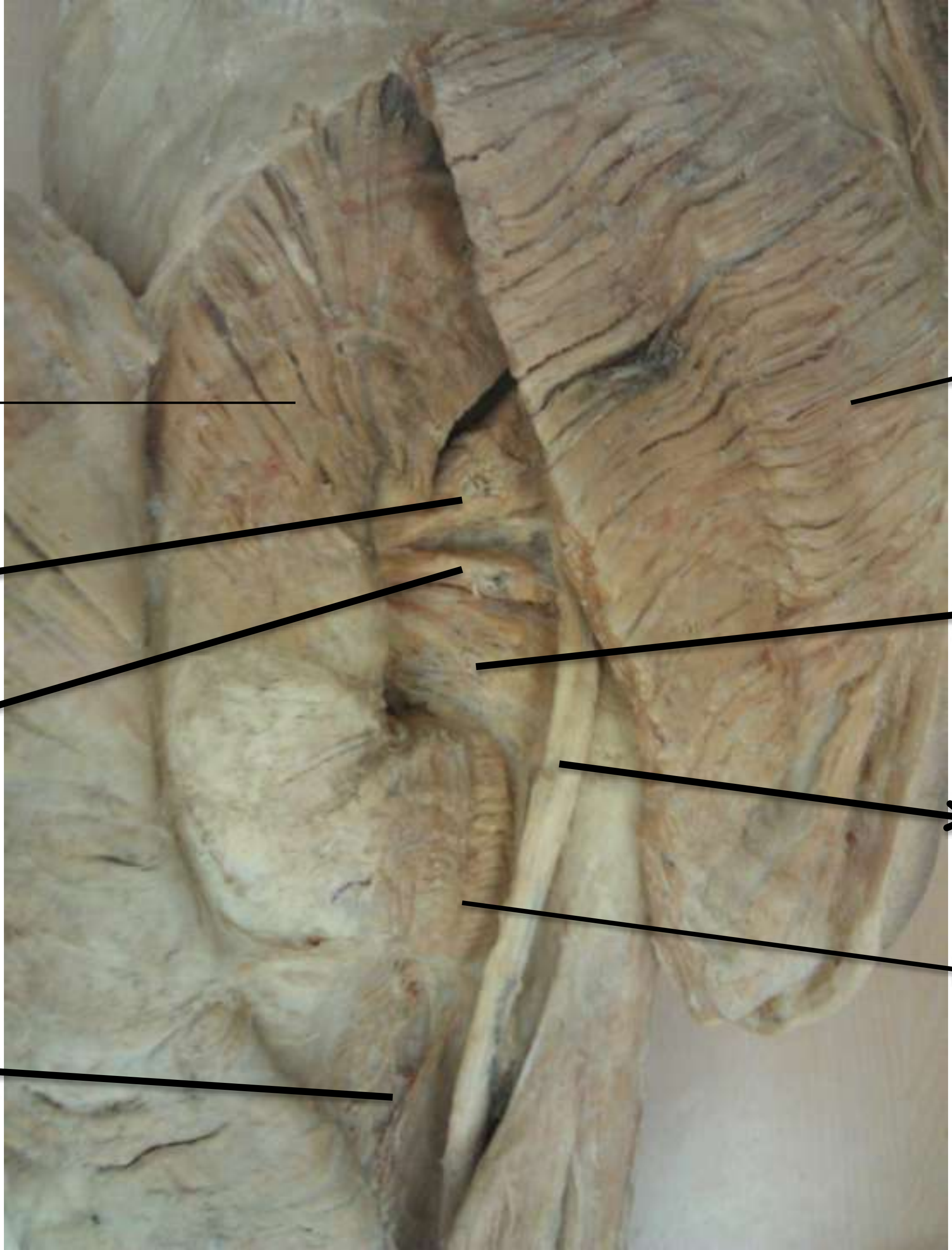
Medial circumflex artery of profundus

Ascending branch of medial circumflex artery

Superior gluteal artery

Sciatic nerve

Sacro tuberous ligament



Gluteal medius

piriforms

Superior gemellus

Ischial part Of adductor magnus

Gluteal maximus

Obturator Internus with inf gemellus

Sciatic nerve

Quadratus femoris

Muscles of back of thigh (hamstring compartment)

Two muscles in the medial side

1)Semitendinosus muscle

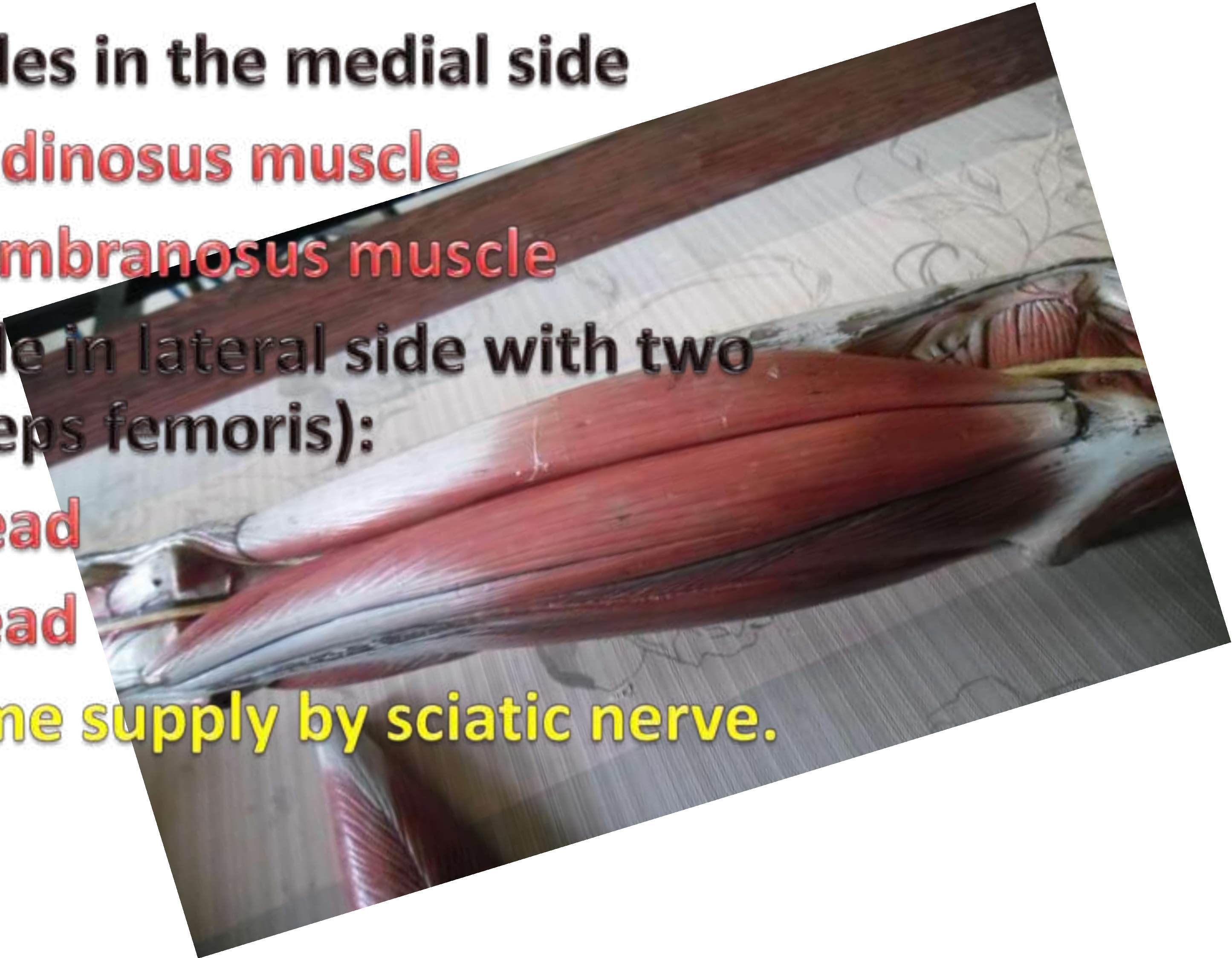
2)Semimembranosus muscle

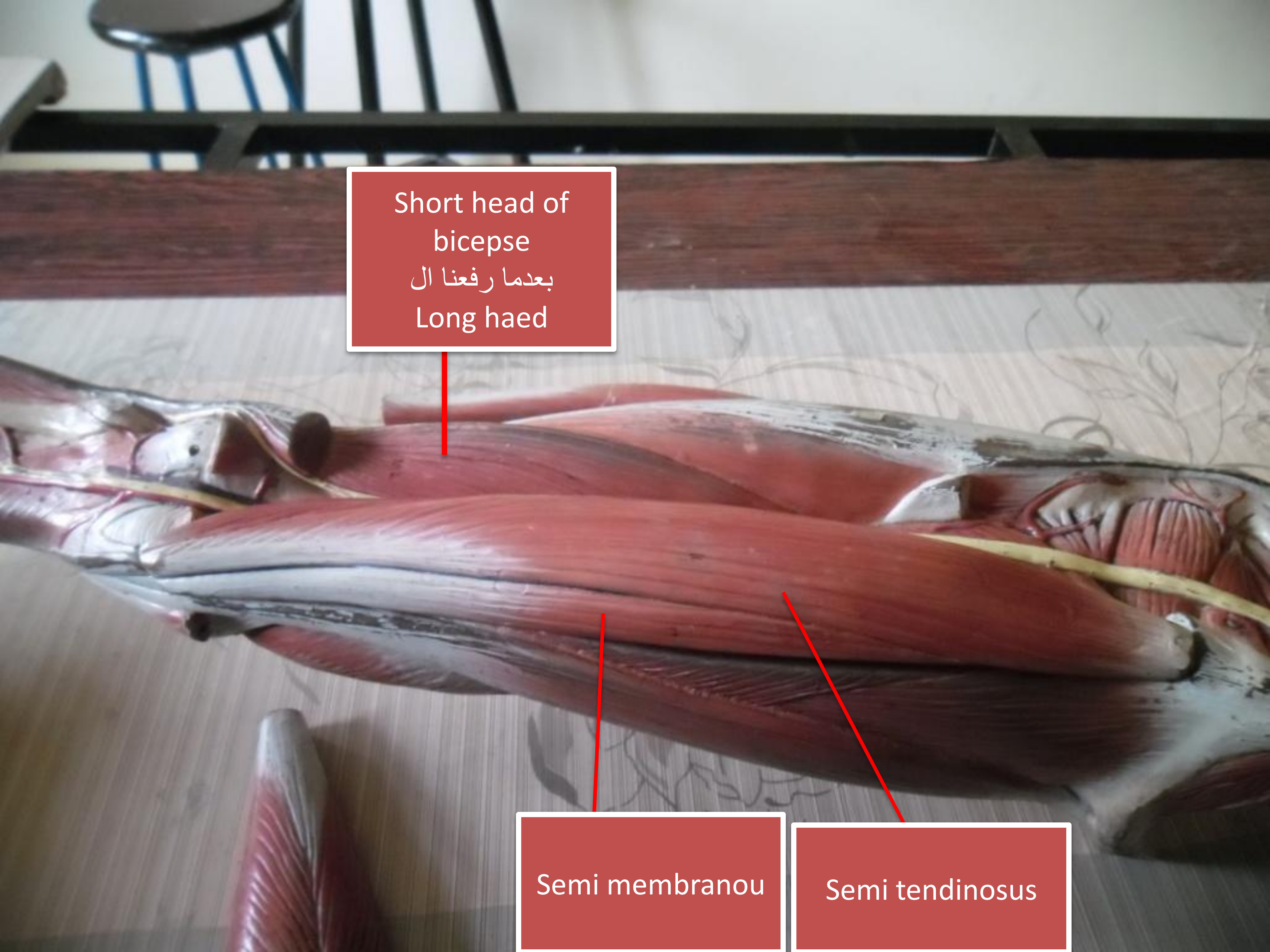
One muscle in lateral side with two heads(biceps femoris):

1)Short head

2) Long head

All of theme supply by sciatic nerve.

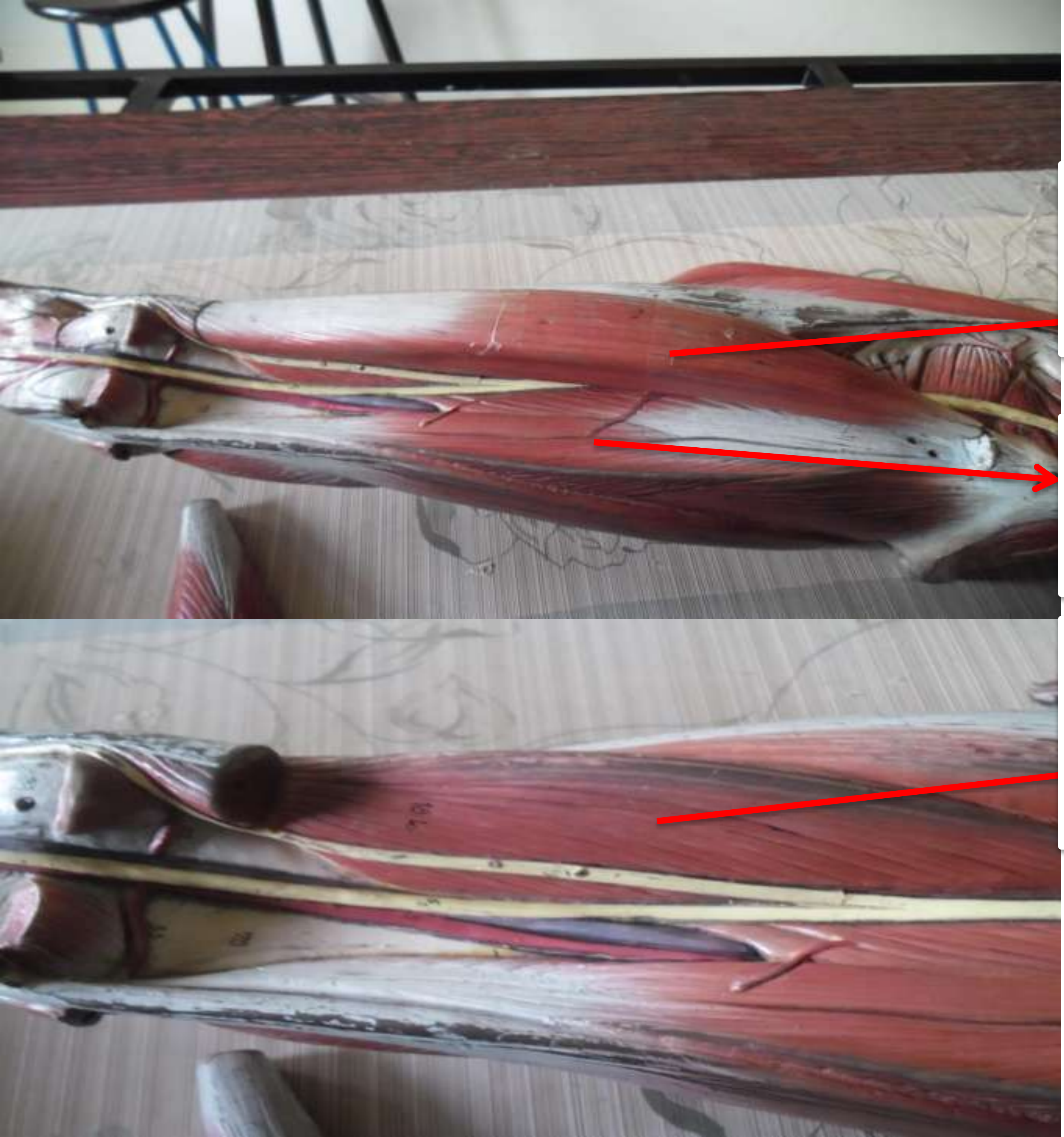




Short head of bicepse
بعدما رفعنا ال
Long haed

Semi membranou

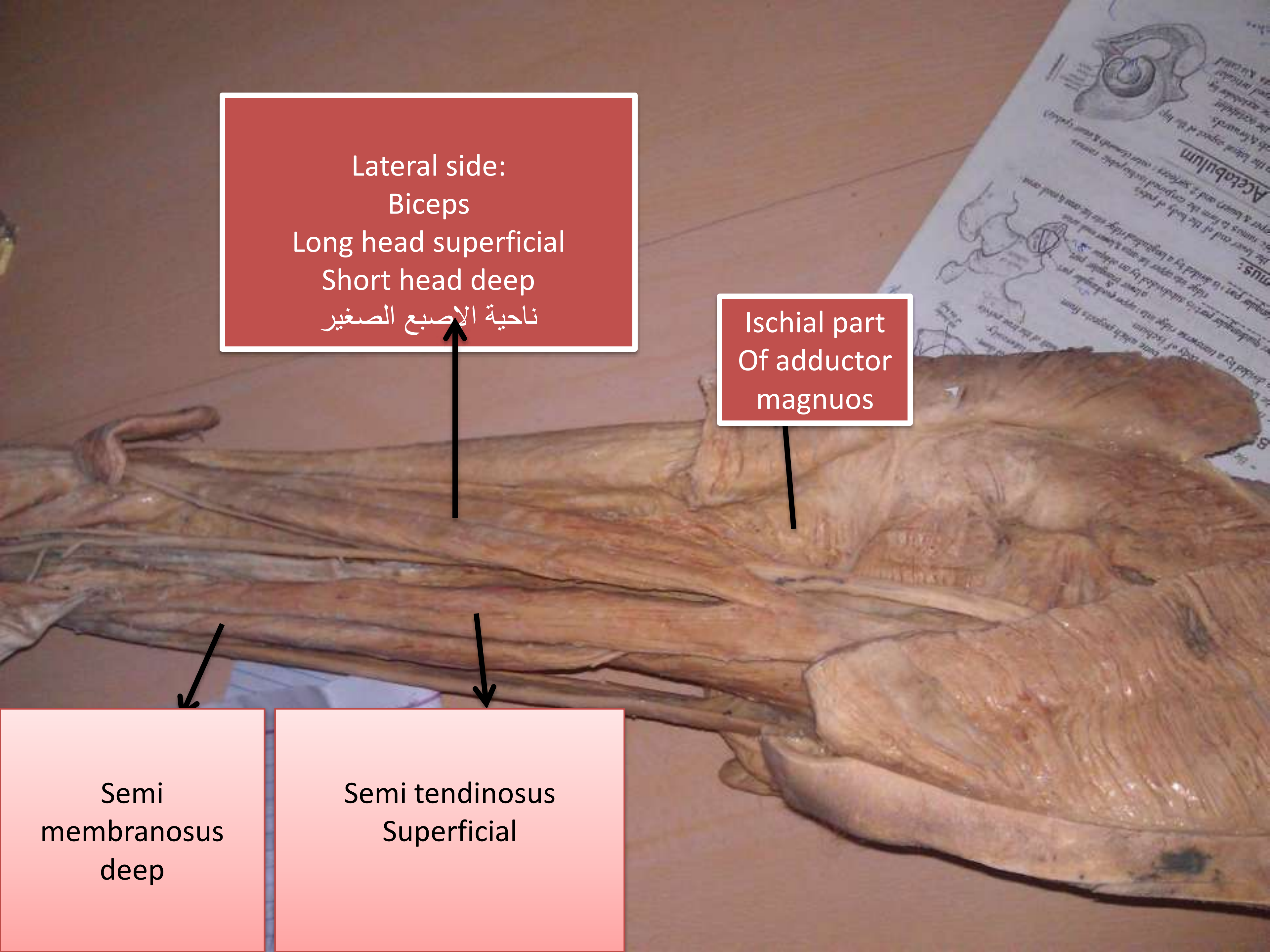
Semi tendinosus



Long head of biceps

Adductor Magnus(deep)
One of the adductor muscles from posterior

Short head of biceps
Deep to long head
(lateral side)



Lateral side:
Biceps
Long head superficial
Short head deep
ناحية الاصبع الصغير

Ischial part
Of adductor
magnuos

Semi
membranosus
deep

Semi tendinosus
Superficial

Muscles of the leg

Muscles of anterior compartment :

1)Tibialis anterior

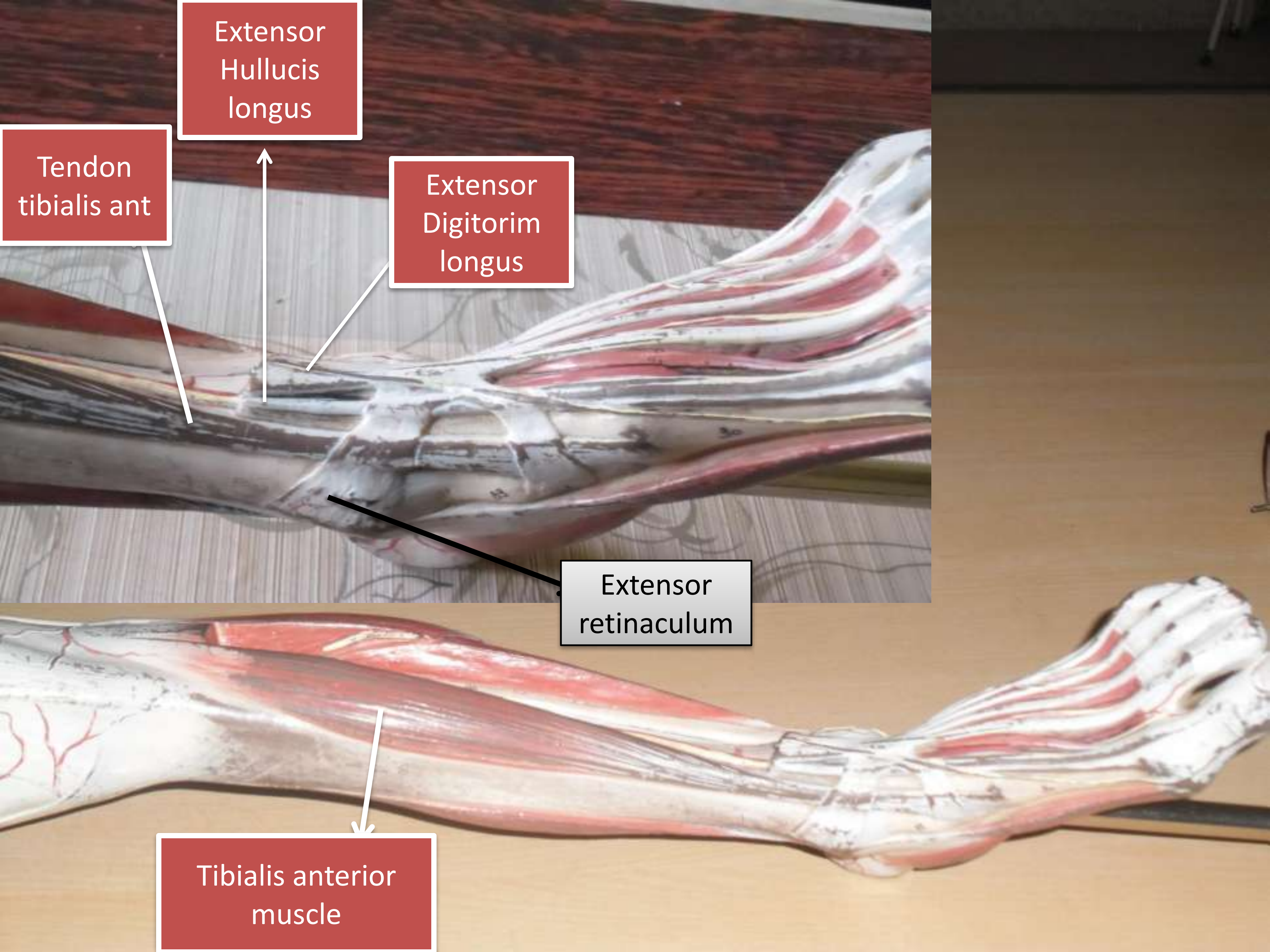
2)Extensor hallucis longus

3)Exyensor digitorum longus

4)Extensor digitorum brevis

5)Peroneus tertius

All of them supply by anterior tibial nerve



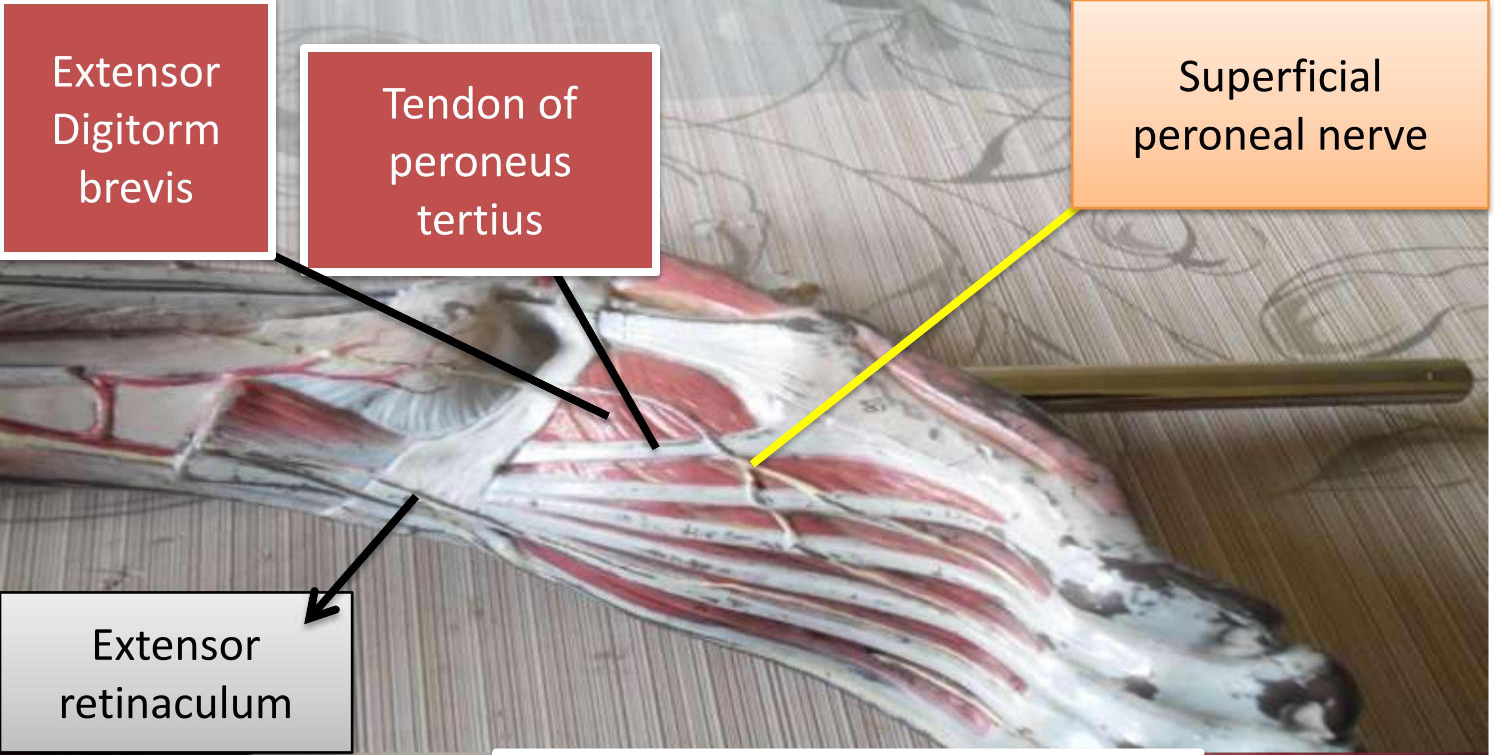
Extensor Hullucis longus

Tendon tibialis ant

Extensor Digitorim longus

Extensor retinaculum

Tibialis anterior muscle

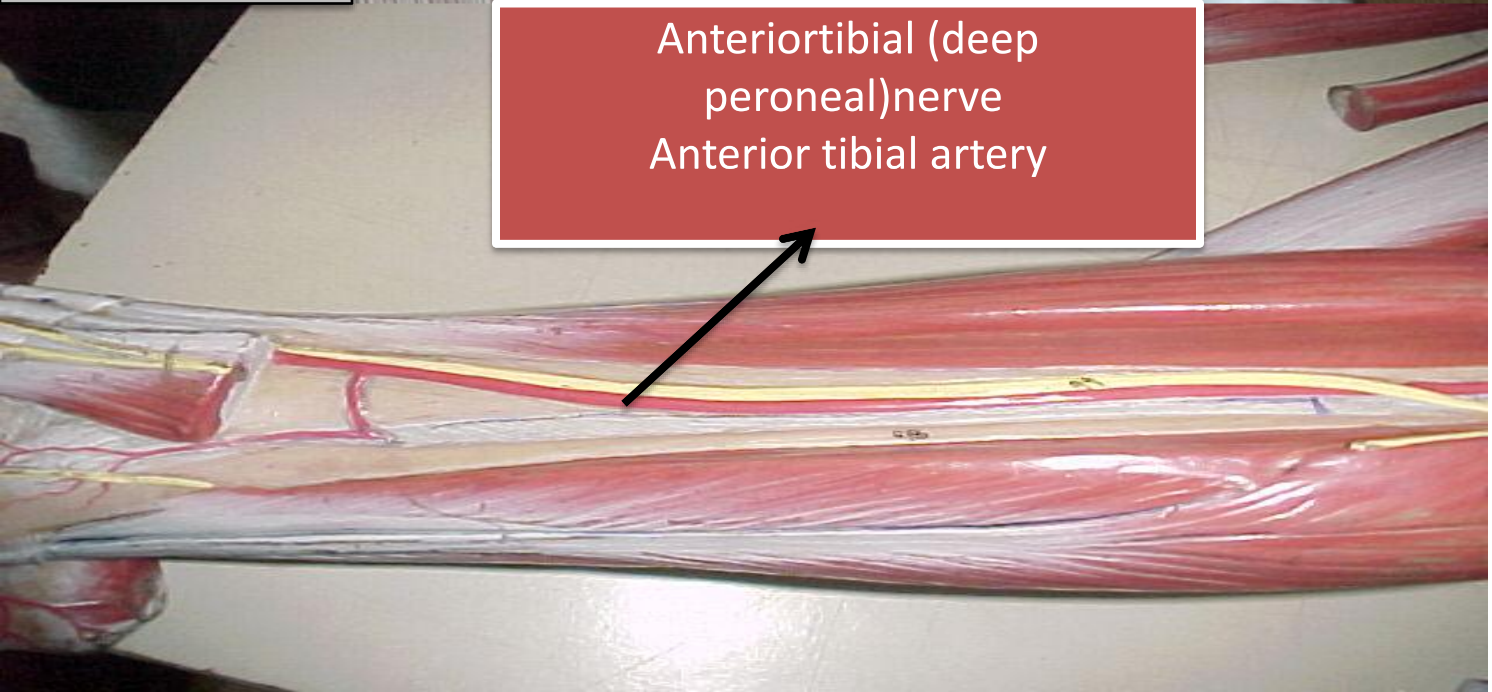


Extensor Digitorm brevis

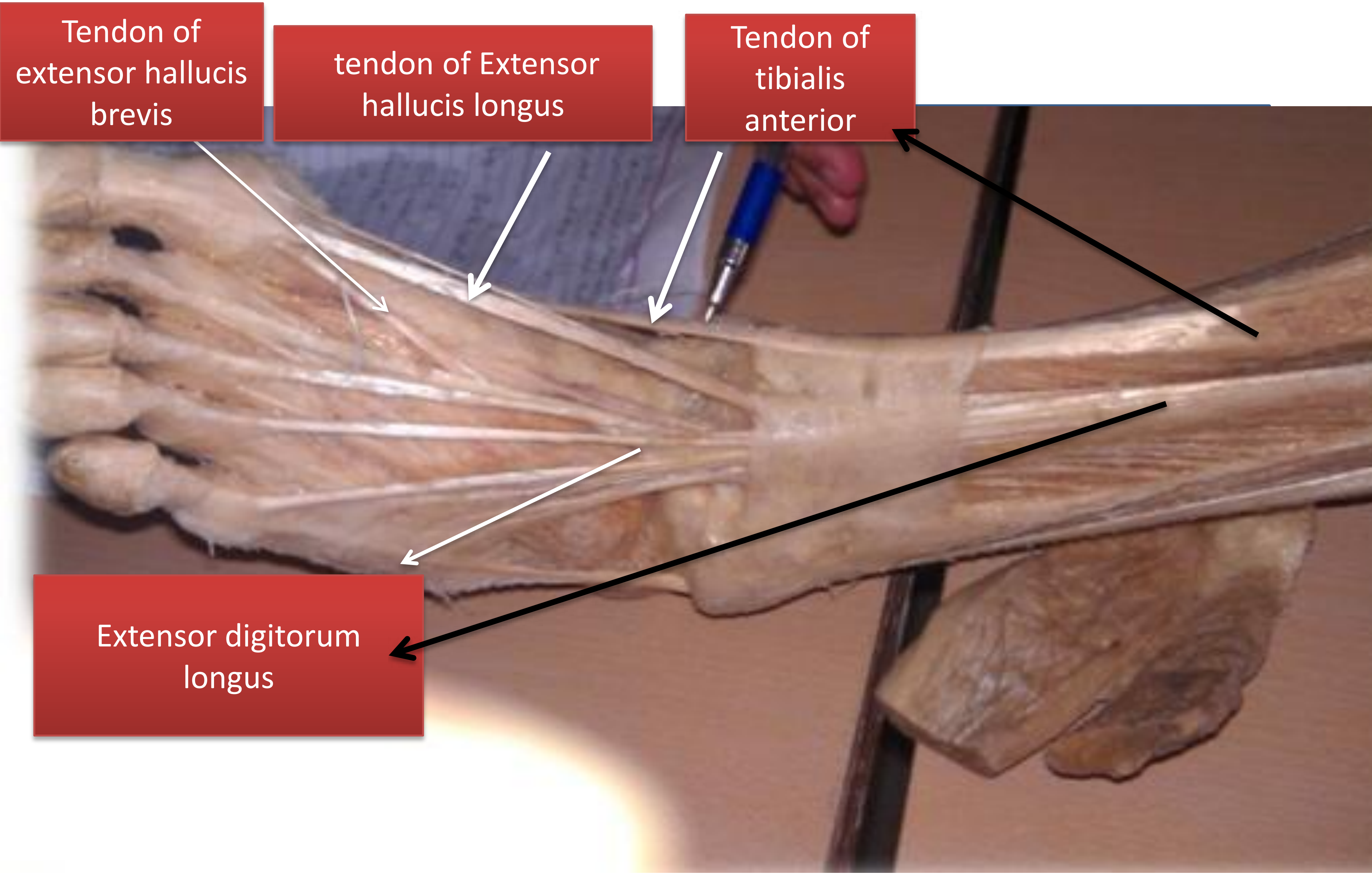
Tendon of peroneus tertius

Superficial peroneal nerve

Extensor retinaculum



Anteriortibial (deep peroneal)nerve
Anterior tibial artery

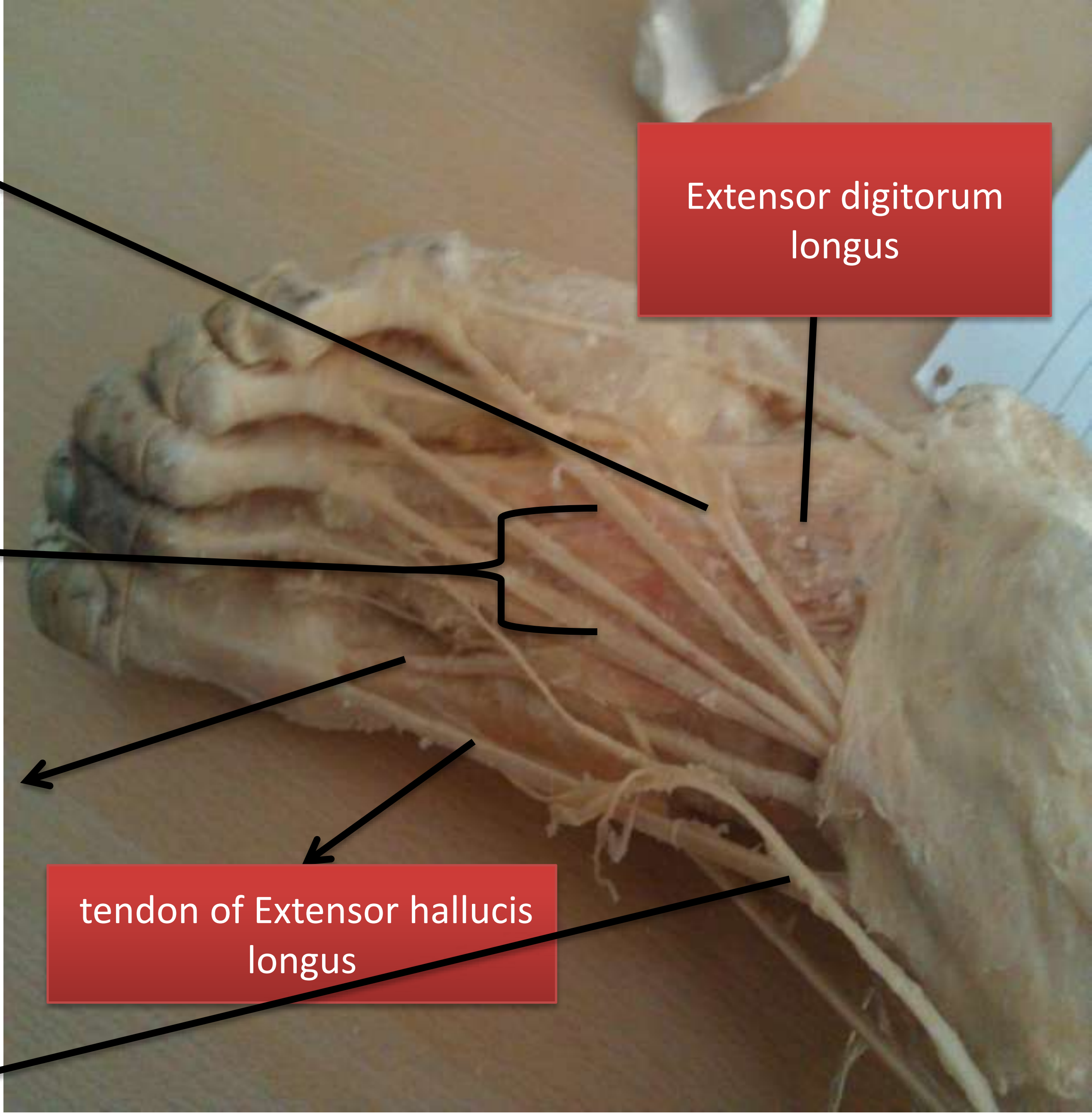


Tendon of extensor hallucis brevis

tendon of Extensor hallucis longus

Tendon of tibialis anterior

Extensor digitorum longus



Tendon of peroneus Tertius muscle

Extensor digitorum longus

Extensor digitorum longus

Tendon of extensor brevis

tendon of Extensor hallucis longus

Superficial peroneal nerve

Posterior compartment of leg

Superficial group:

1)Gastrocnemius

2)Plantaris

3)Soleus

All of them supply by medial popliteal nerve

Deep group:

1)Tibialis posterior

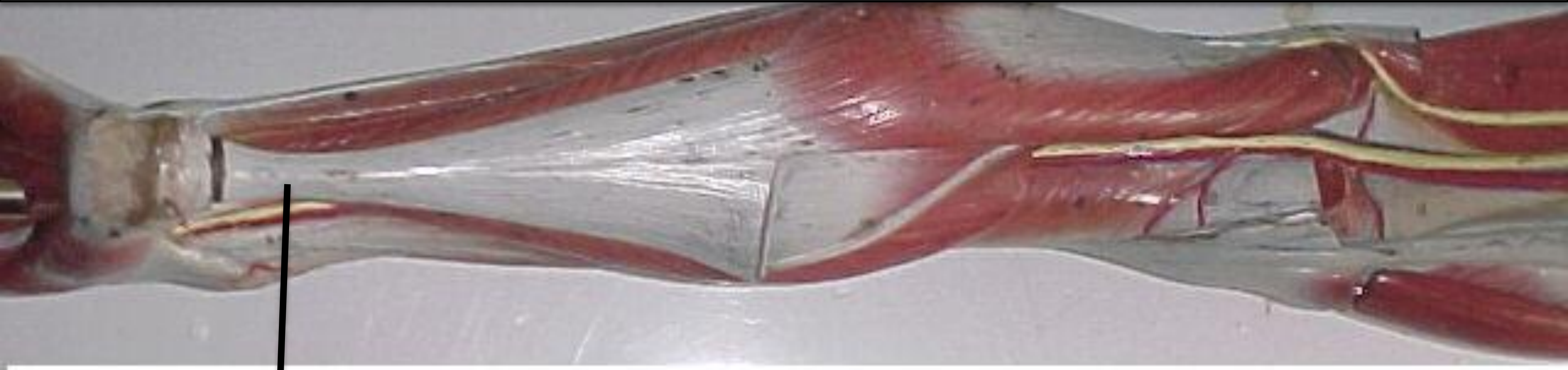
2)Flexor hallucis longus

3)Flexor digitorum longus

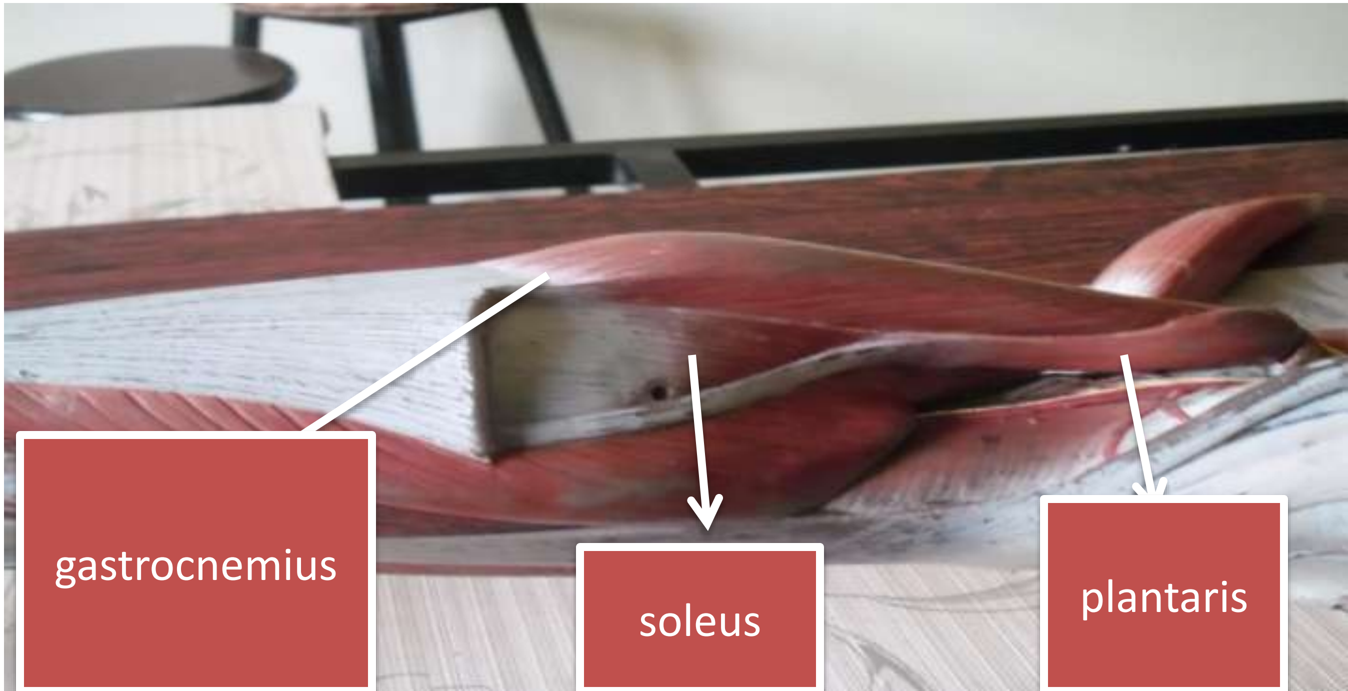
4)Popliteus

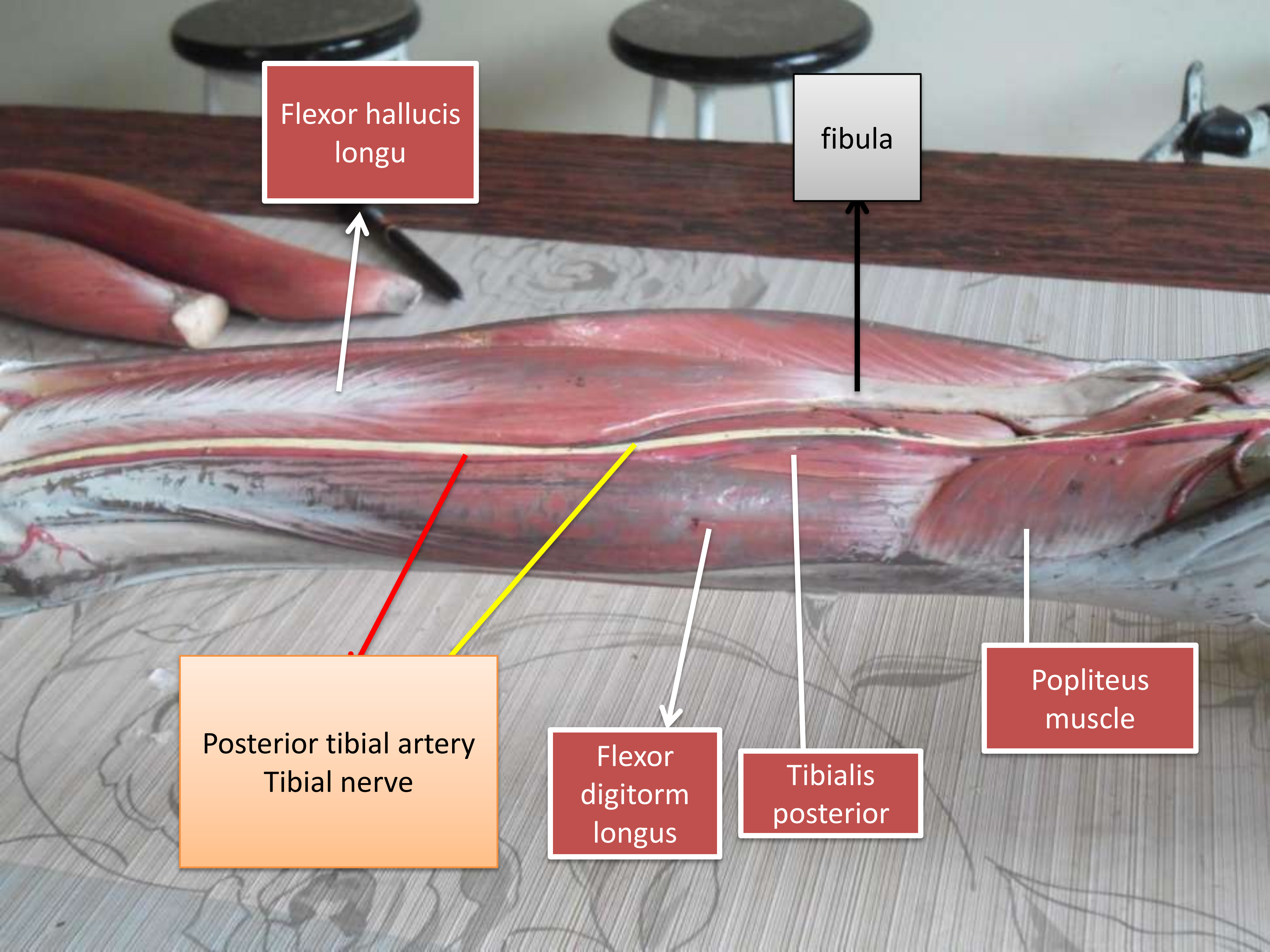
All of them supply by posterior tibial nerve

Leg
Superficial group



Tendocalcaneus
(achilis)
The thickest and strongest
Tendon in the body it is
about 15 cm


gastrocnemius
soleus
plantaris



Flexor hallucis longu

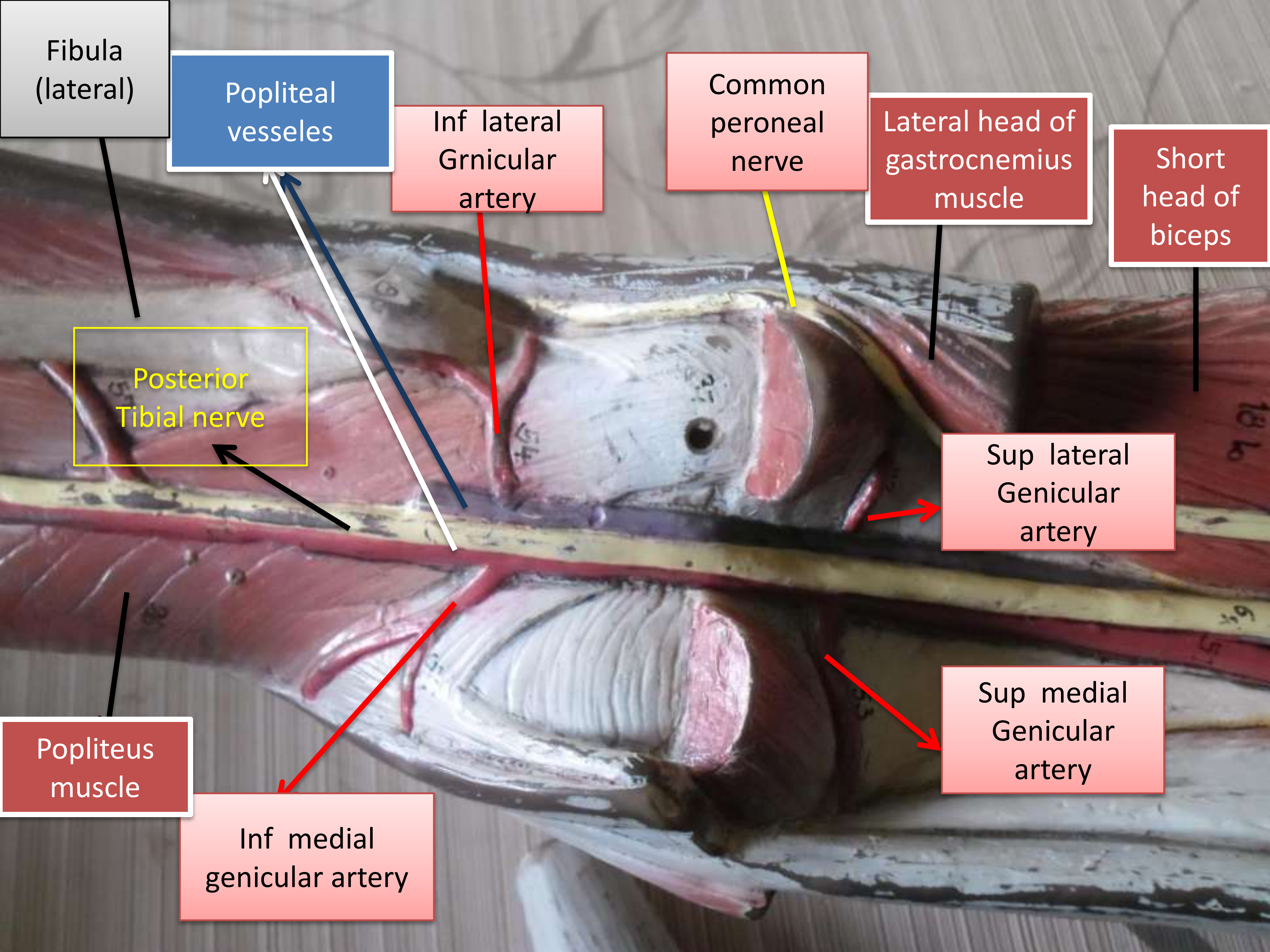
fibula

Posterior tibial artery
Tibial nerve

Flexor digitorm longus

Tibialis posterior

Popliteus muscle


Fibula (lateral)

Popliteal vesseles

Inf lateral Grnicular artery

Common peroneal nerve

Lateral head of gastrocnemius muscle

Short head of biceps

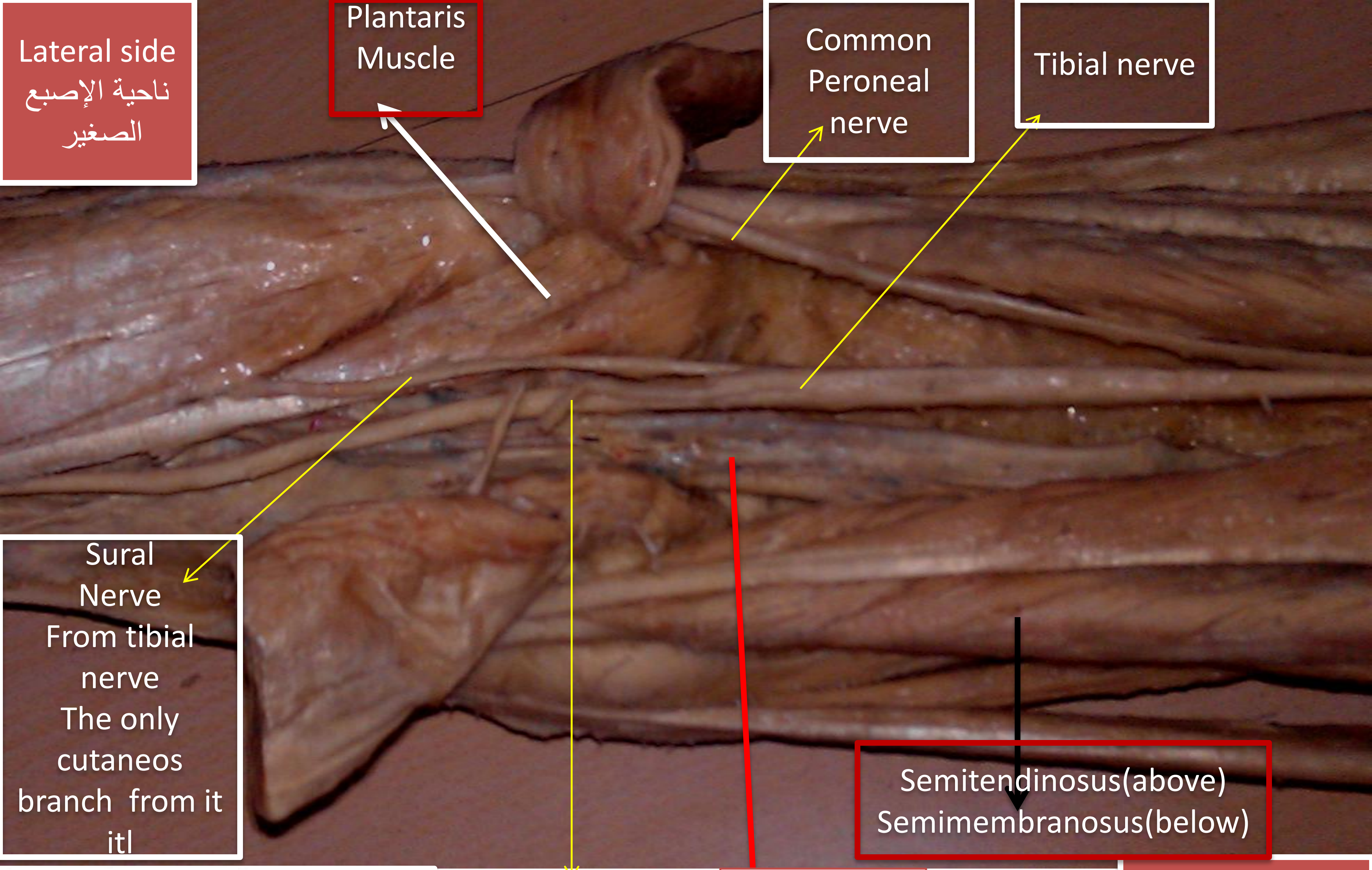
Posterior Tibial nerve

Sup lateral Genicular artery

Sup medial Genicular artery

Popliteus muscle

Inf medial genicular artery



Lateral side
ناحية الإصبع الصغير

Plantaris
Muscle

Common
Peroneal
nerve

Tibial nerve

Sural
Nerve
From tibial
nerve
The only
cutaneos
branch from it
itl

Semitendinosus(above)
Semimembranosus(below)

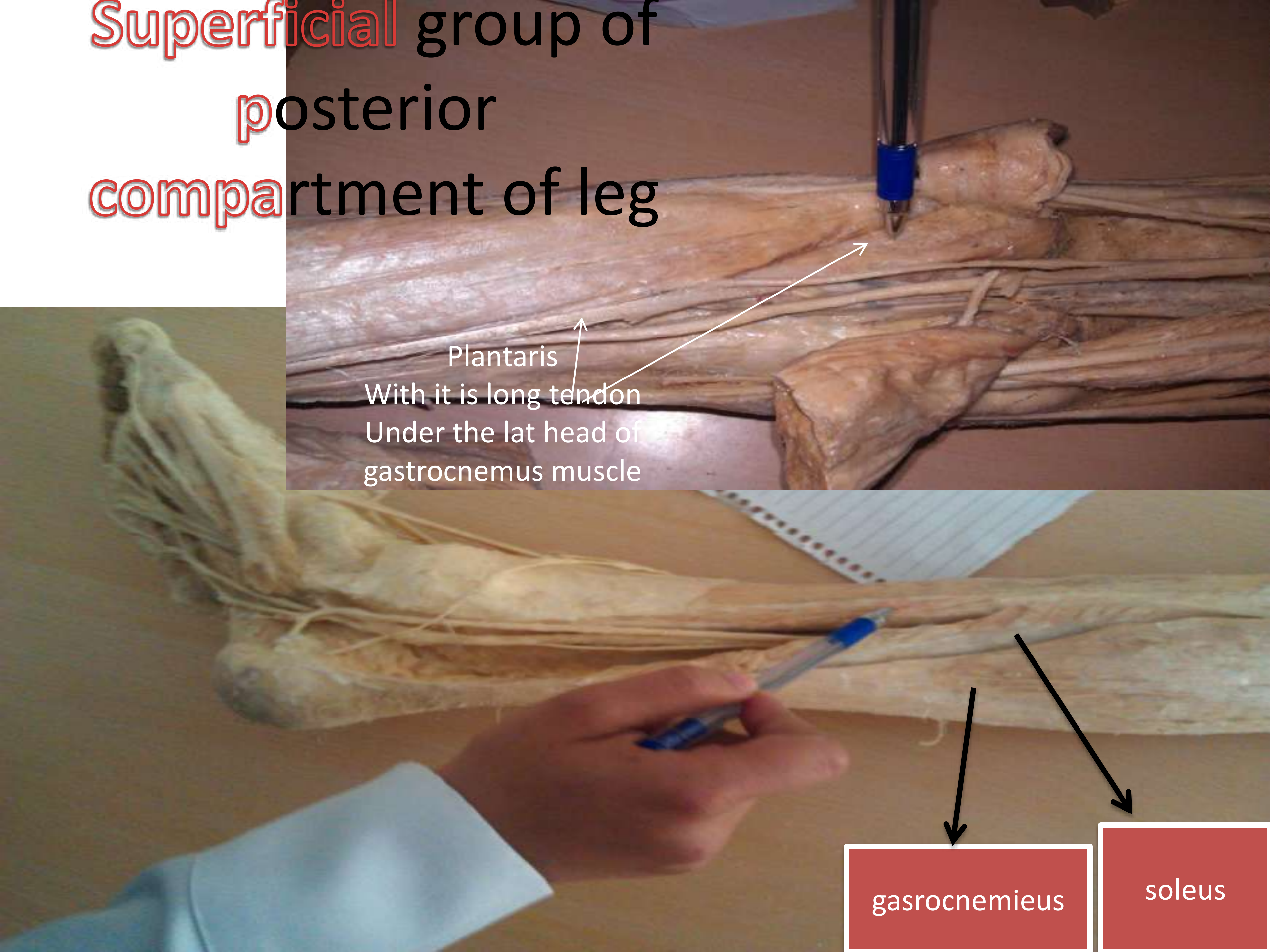
Posterior view :
Popliteal fossa

Nerve to
Gastrocnemus
muscle
يكون مقطوع

Popliteal
vesseles

Medial side
ناحية الإصبع الكبير

Superficial group of posterior compartment of leg

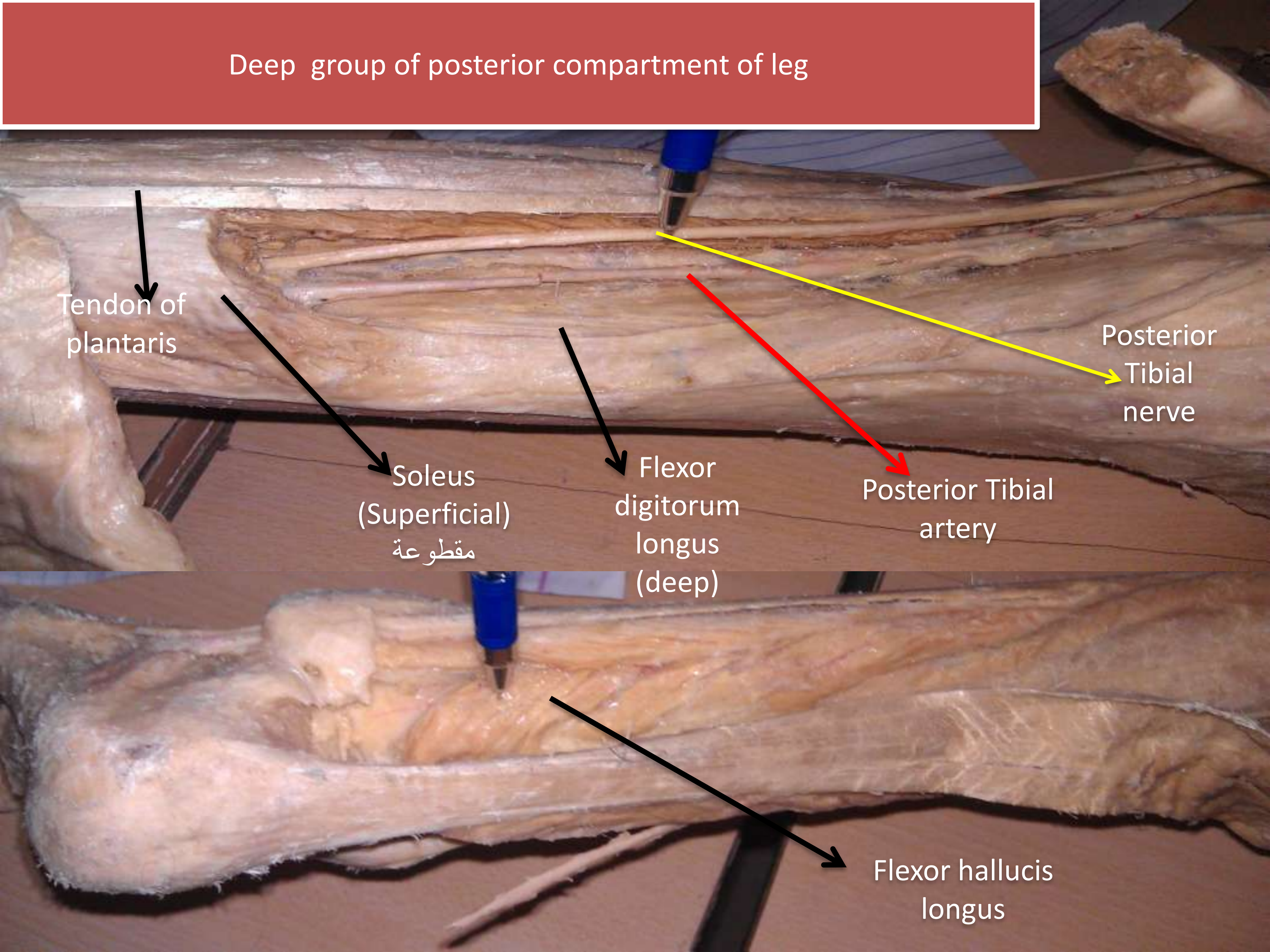


Plantaris
With it is long tendon
Under the lat head of
gastrocnemus muscle

gasrocnemieus

soleus

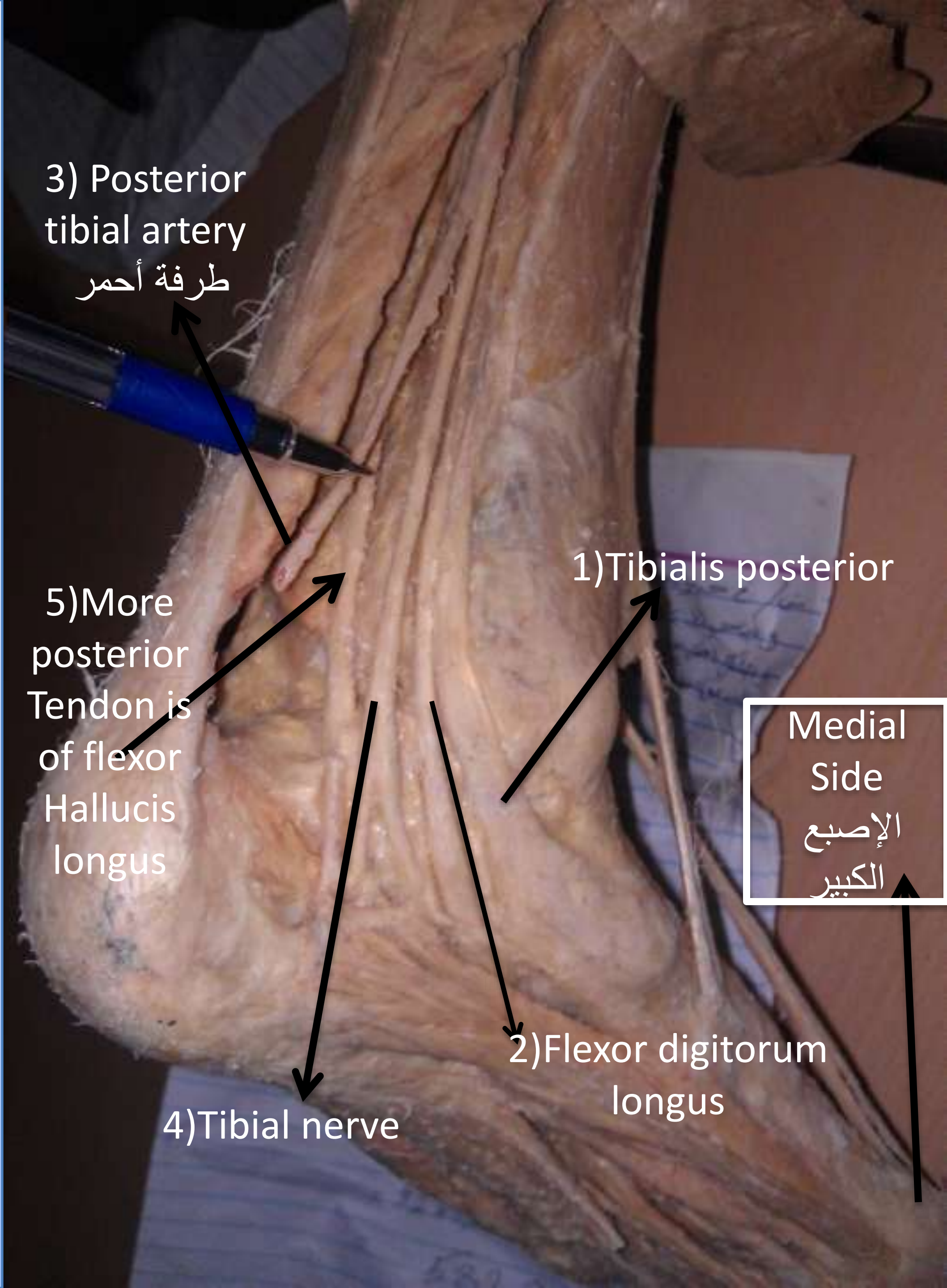
Deep group of posterior compartment of leg


Tendon of plantaris
Soleus (Superficial) مقطوعة
Flexor digitorum longus (deep)
Posterior Tibial artery
Posterior Tibial nerve
Flexor hallucis longus

Structures pass deep to
Flexor retinaculum

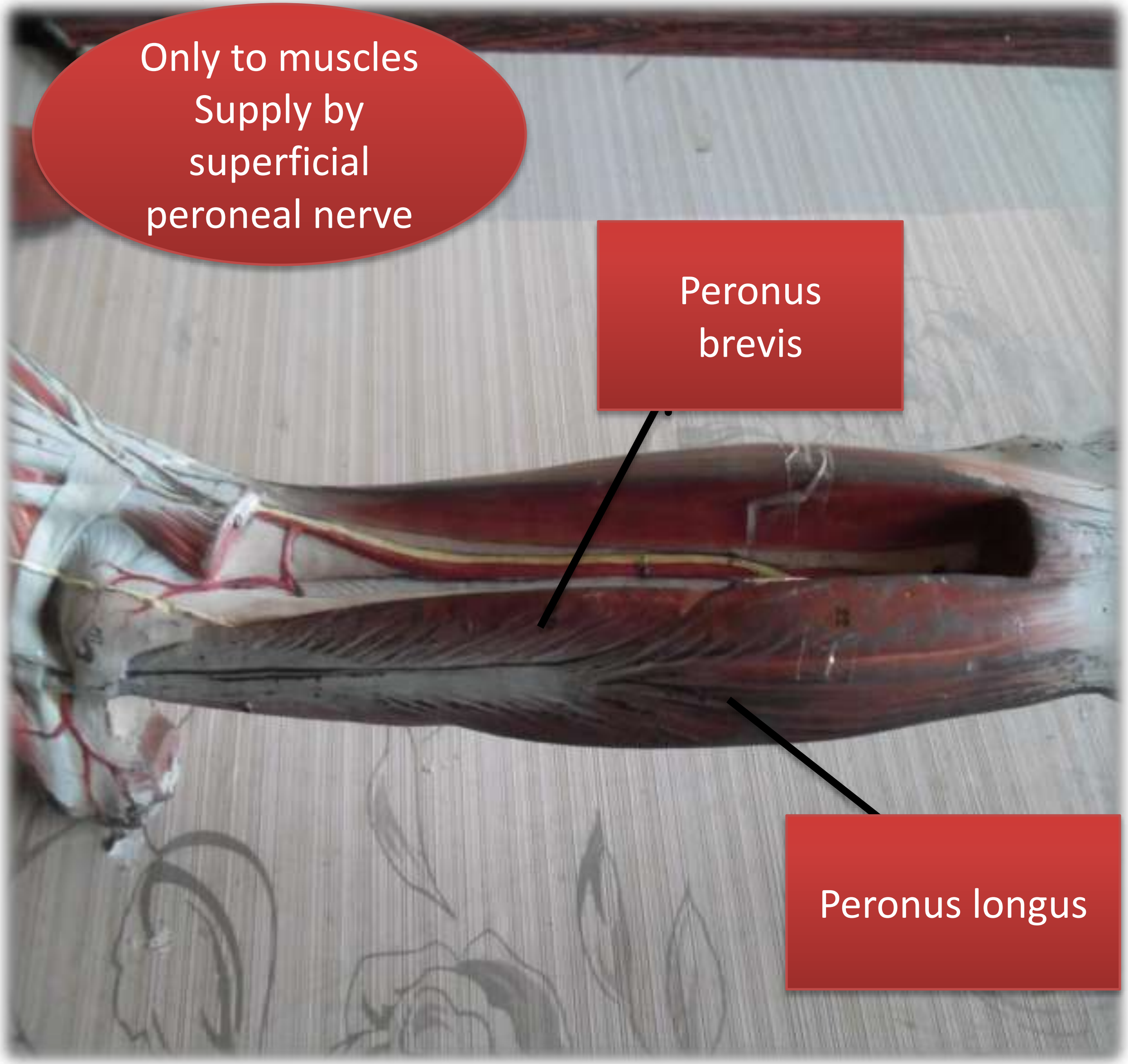
From med to lat:

Tom: tibialis posterior
Does: flexor digitorum longus
Very: post tibial vessels
Nice: posterior tibial nerve
Hast: flexor hallocis longus



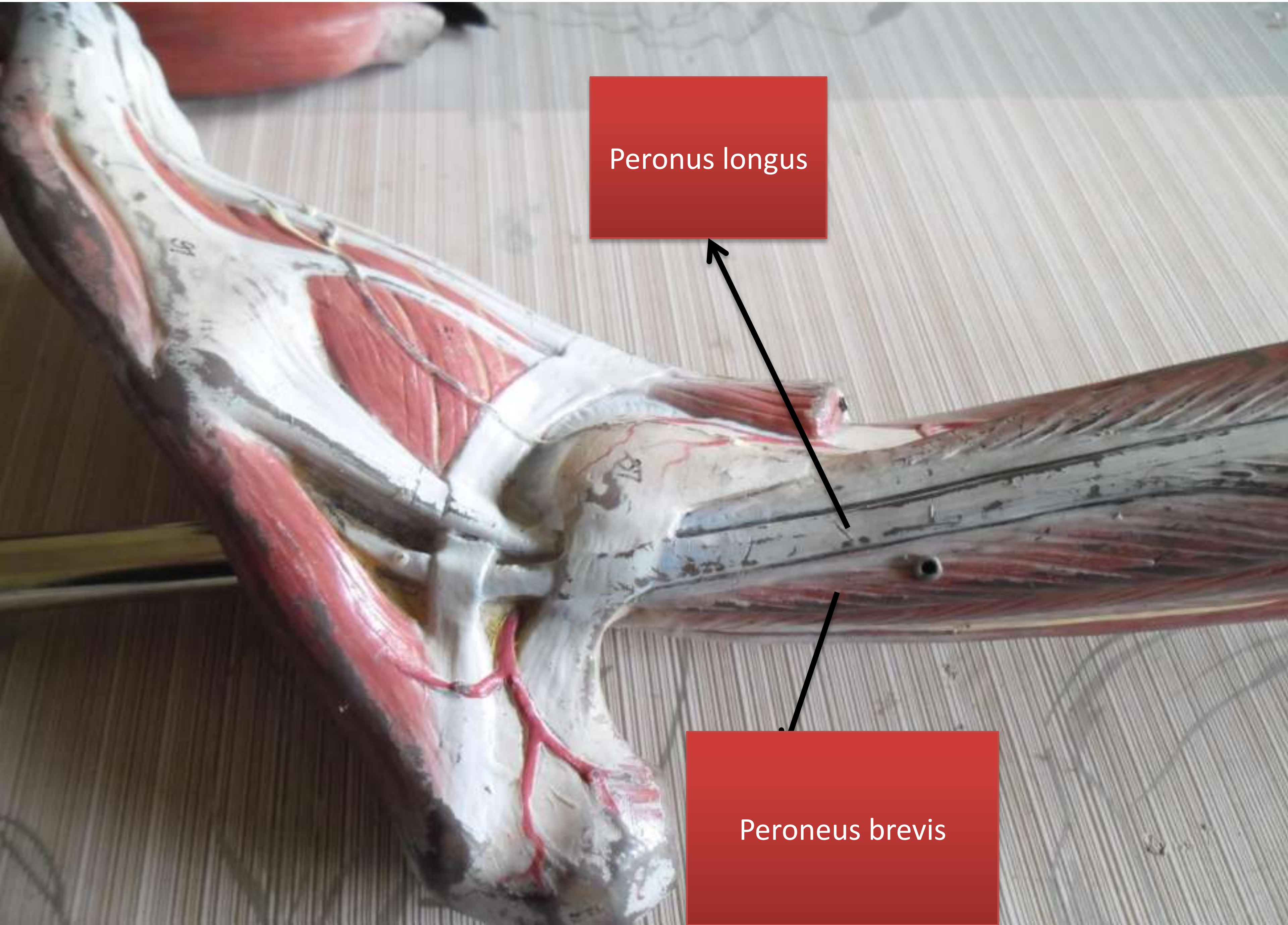
3) Posterior tibial artery
طرفة أحمر
1)Tibialis posterior
5)More posterior Tendon is of flexor Hallucis longus
Medial Side
الإصبع الكبير
2)Flexor digitorum longus
4)Tibial nerve

Lateral compartment of leg



Only to muscles Supply by superficial peroneal nerve

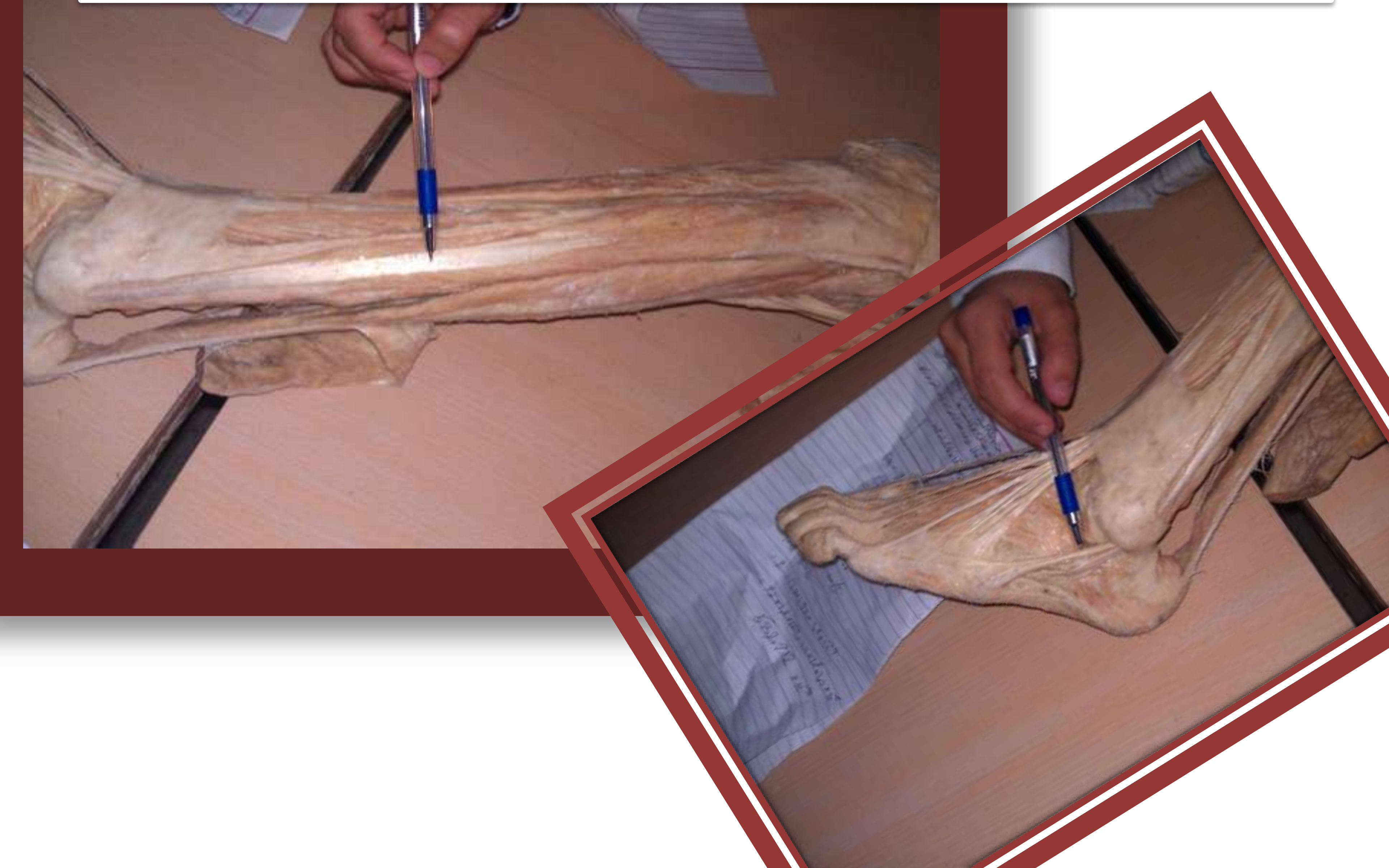
Peronus brevis
Peronus longus

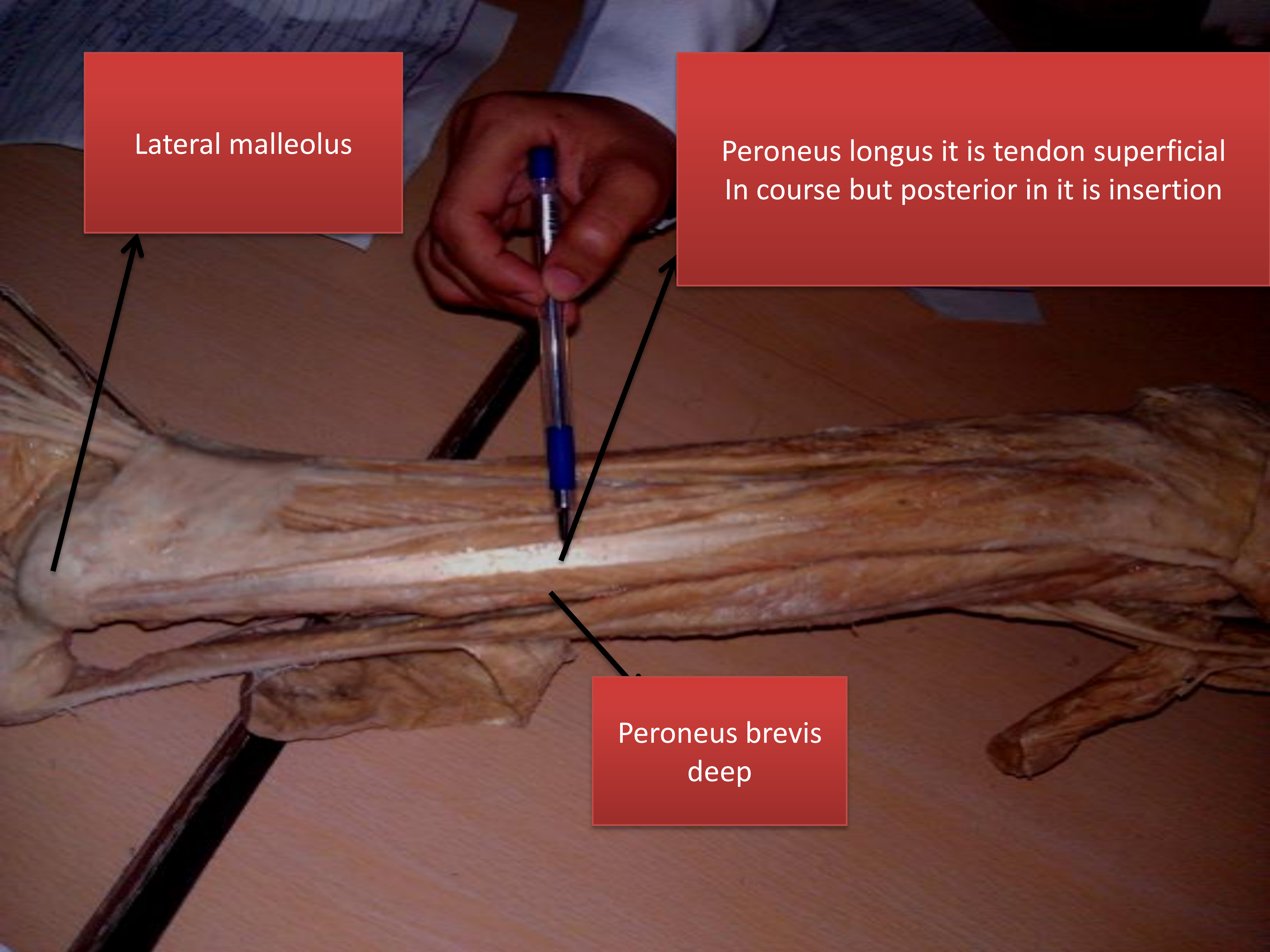


Peronus longus

Peroneus brevis

Lateral copartment of leg

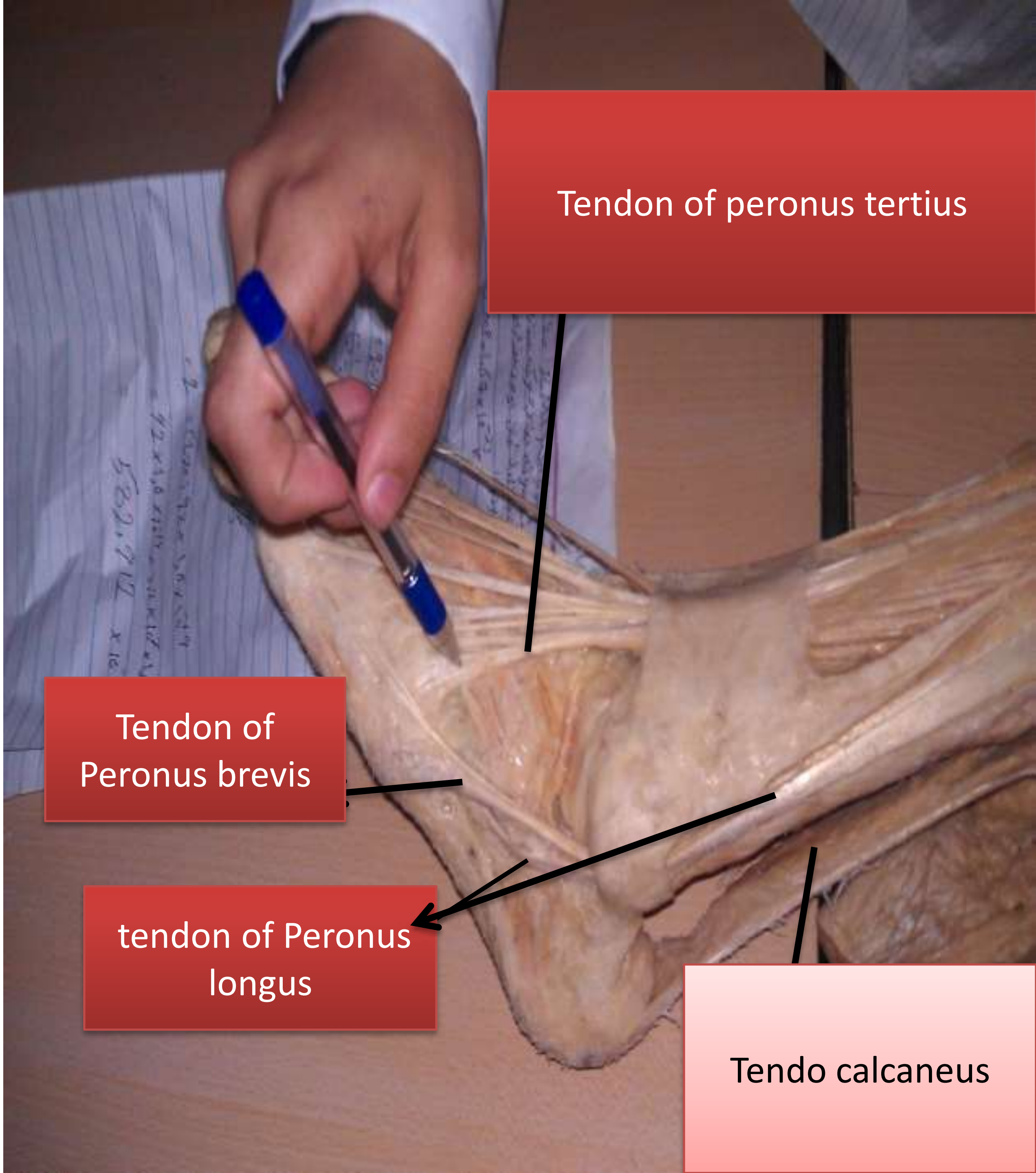




Lateral malleolus

Peroneus longus it is tendon superficial
In course but posterior in it is insertion

Peroneus brevis
deep

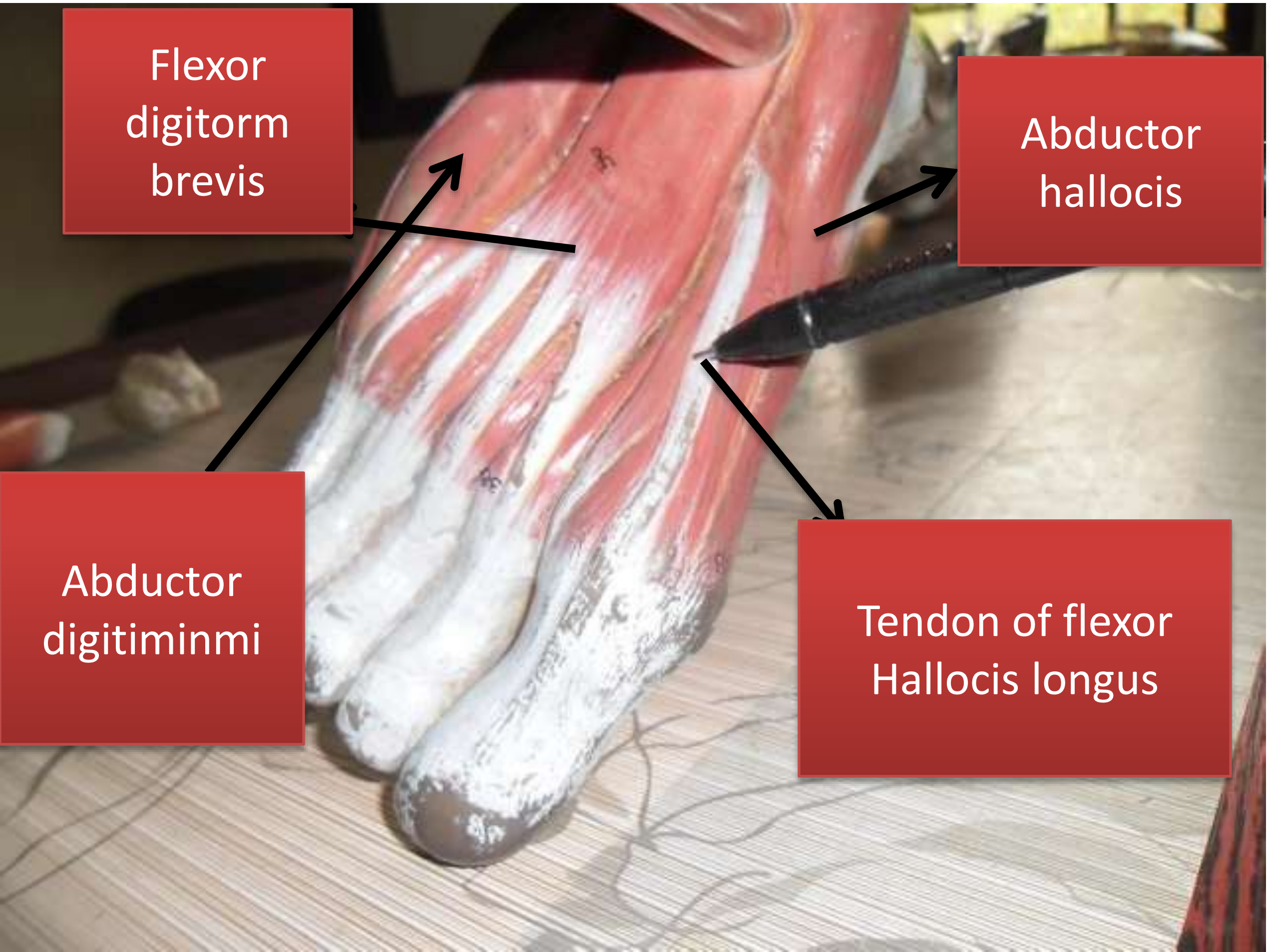


Tendon of peronus tertius

Tendon of Peronus brevis

tendon of Peronus longus

Tendo calcaneus

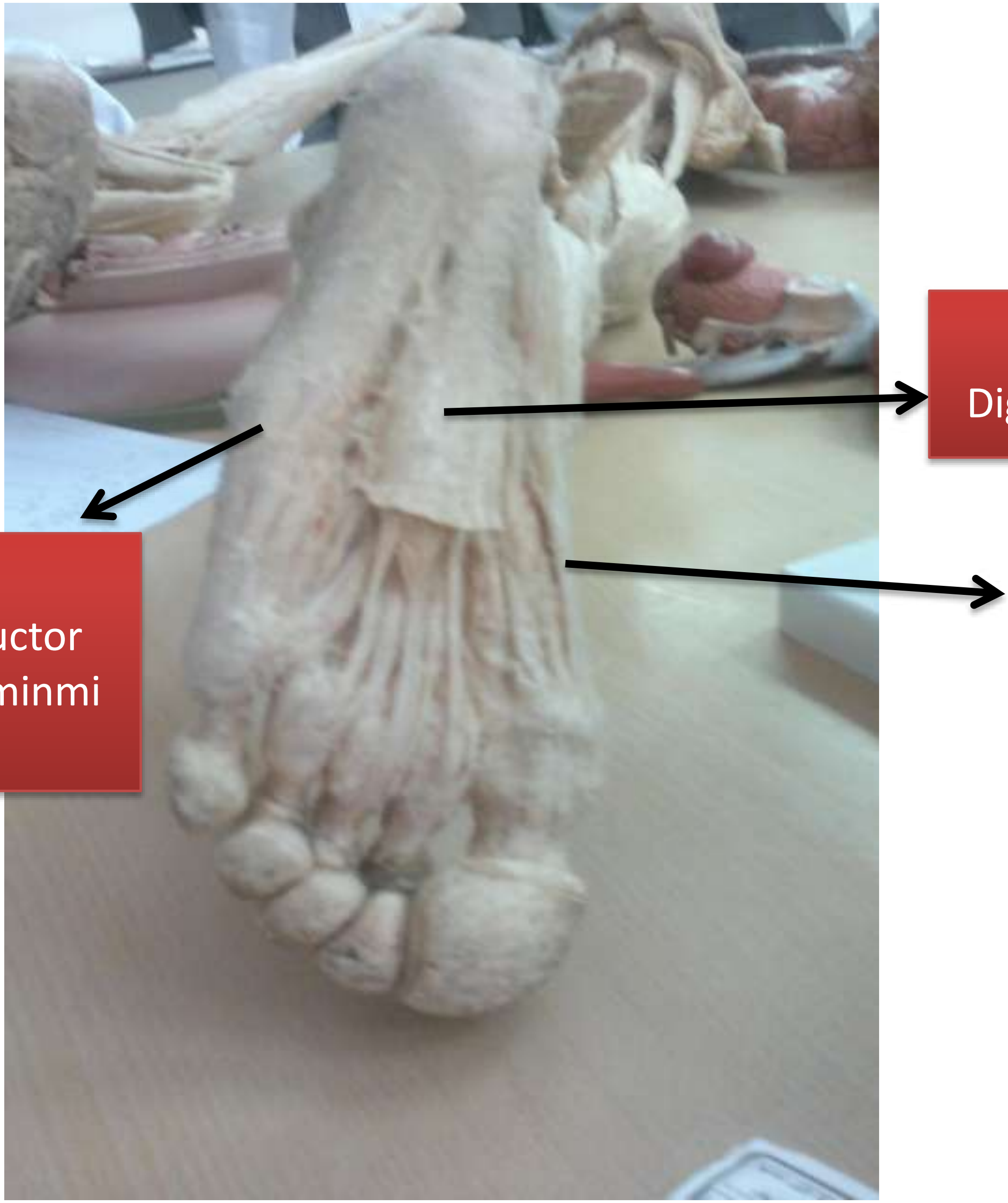


Flexor digitorm brevis

Abductor hallocis

Abductor digitiminmi

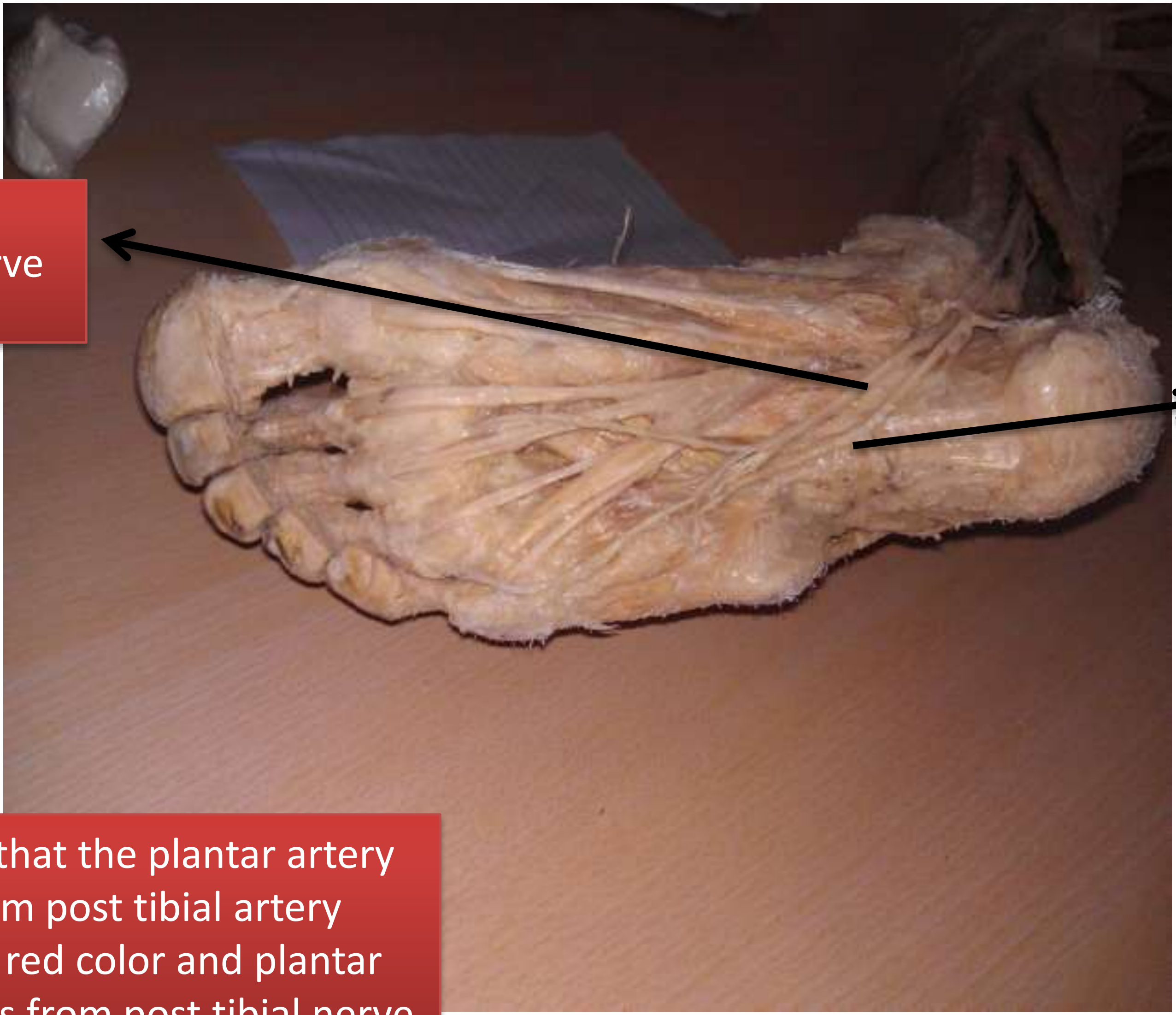
Tendon of flexor Hallocis longus



Flexor
Digiturom brevis

Abductor
hallocis

Abductor
digitiminmi

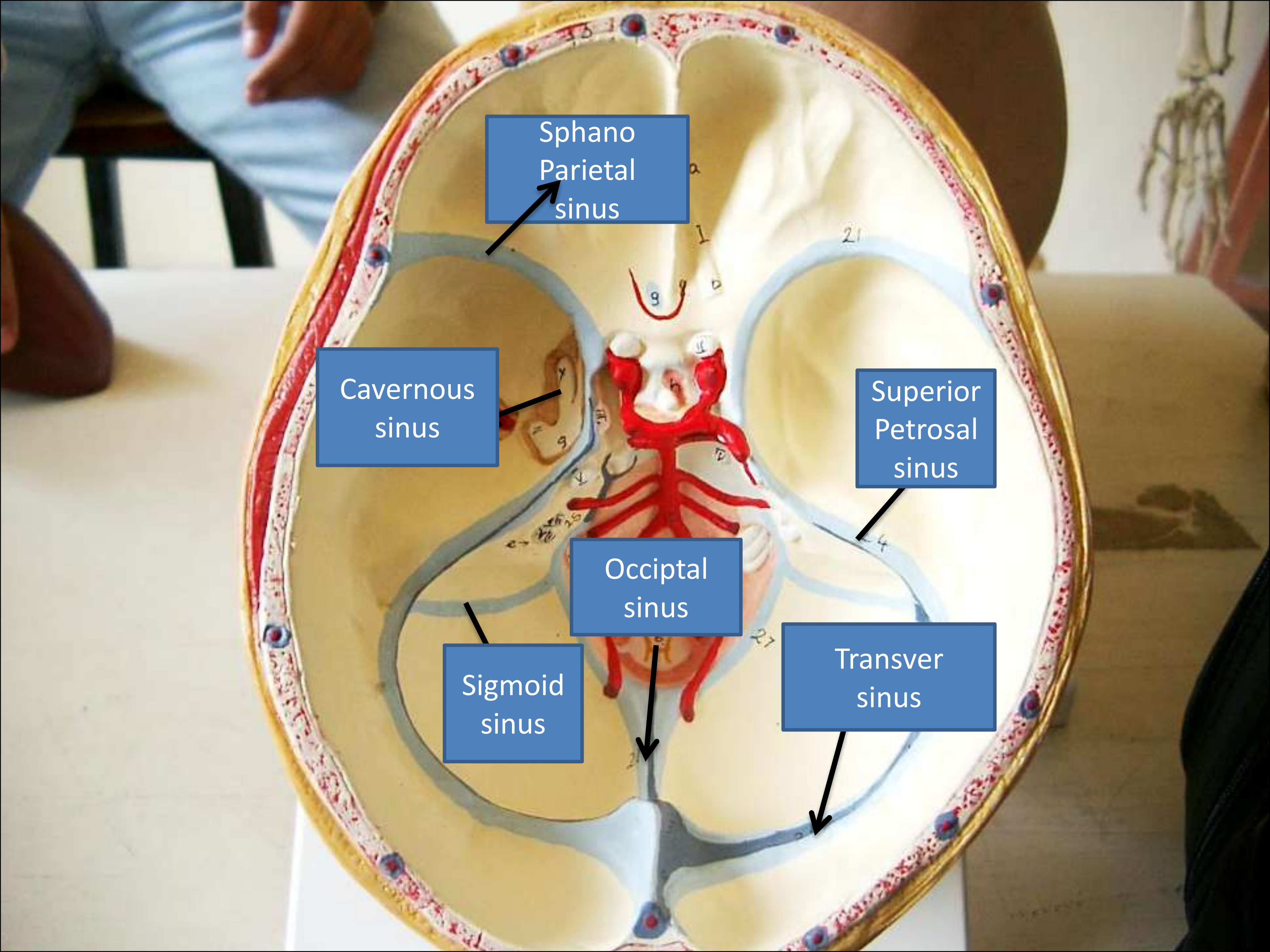


Plantar nerve

Plantar artery

Note that the plantar artery from post tibial artery
With red color and plantar nerve is from post tibial nerve

NEUROANATOMY



Sphano Parietal sinus

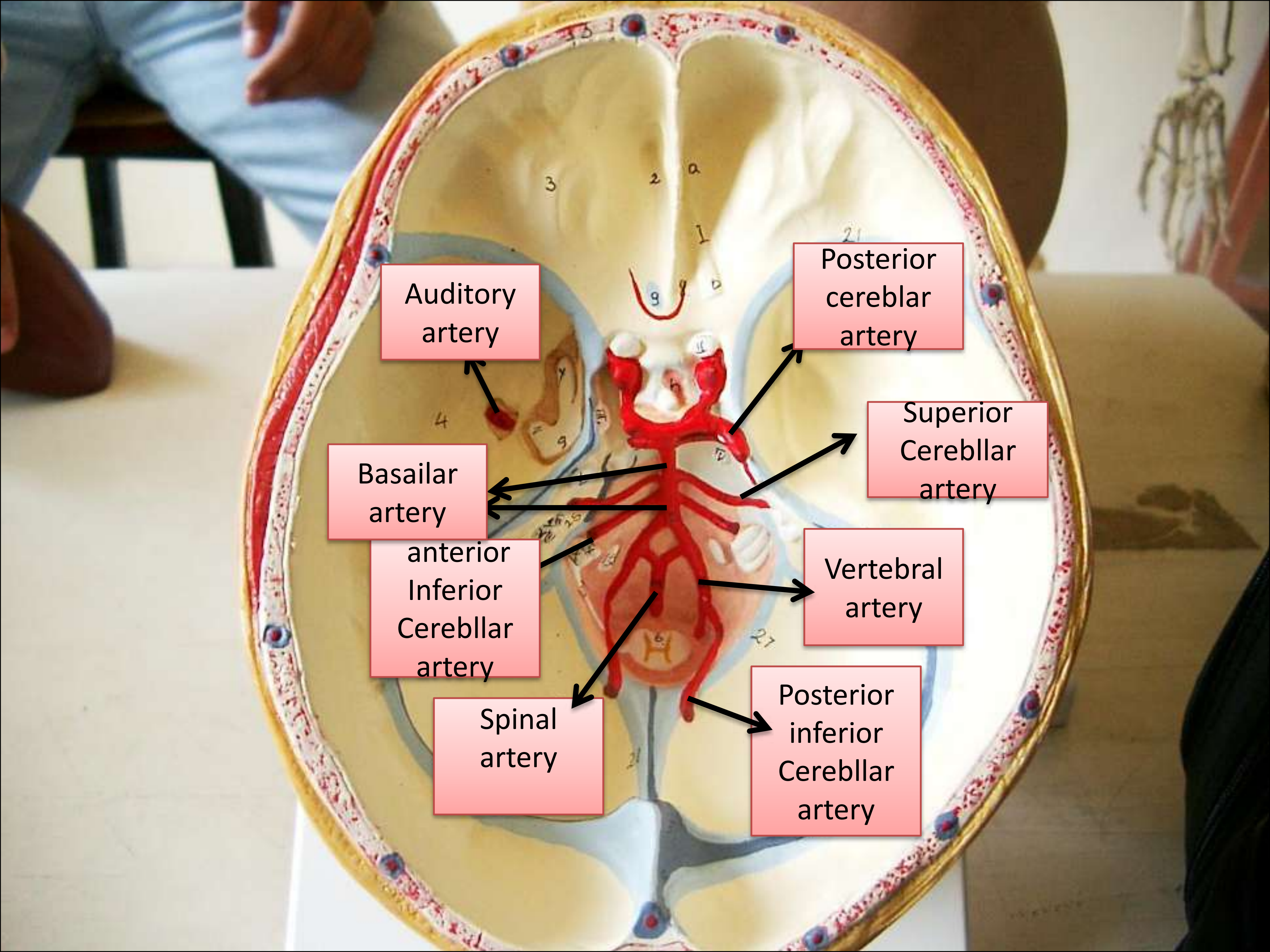
Cavernous sinus

Superior Petrosal sinus

Occiptal sinus

Sigmoid sinus

Transver sinus



Auditory artery

Posterior cereblar artery

Superior Cerebllar artery

Basailar artery

anterior Inferior Cerebllar artery

Vertebral artery

Spinal artery

Posterior inferior Cerebllar artery

DIECEPHALON

DIECEPHALON BOUNDERY:

anterior wall:

1)ANT COMMISSURE
2)LAMINA TERMINALIS
3)OPTIC CHIASM

posterior wall:

1)PINEAL BODY
2)POST COMMISSURE
3)COLLICULI OF MID BRAIN

floor:

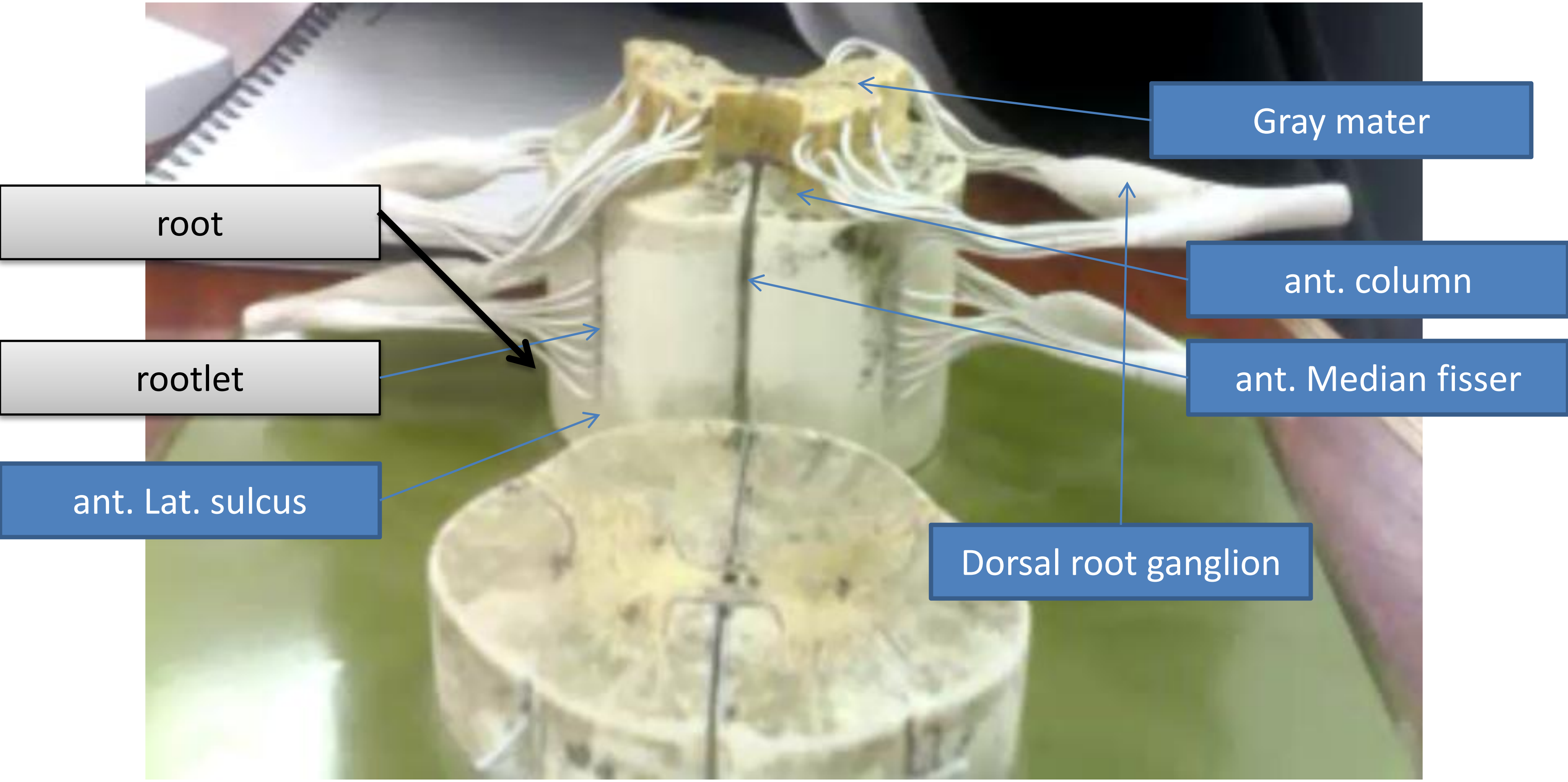
1)INFUNDIBULUM
2)MAMMILLARY BODY
3)TEGMENTUM

lateral wall:

1)HYPOTHALAMIC SULCUS
2)THALMUS

CNS

Spinal cord



root

rootlet

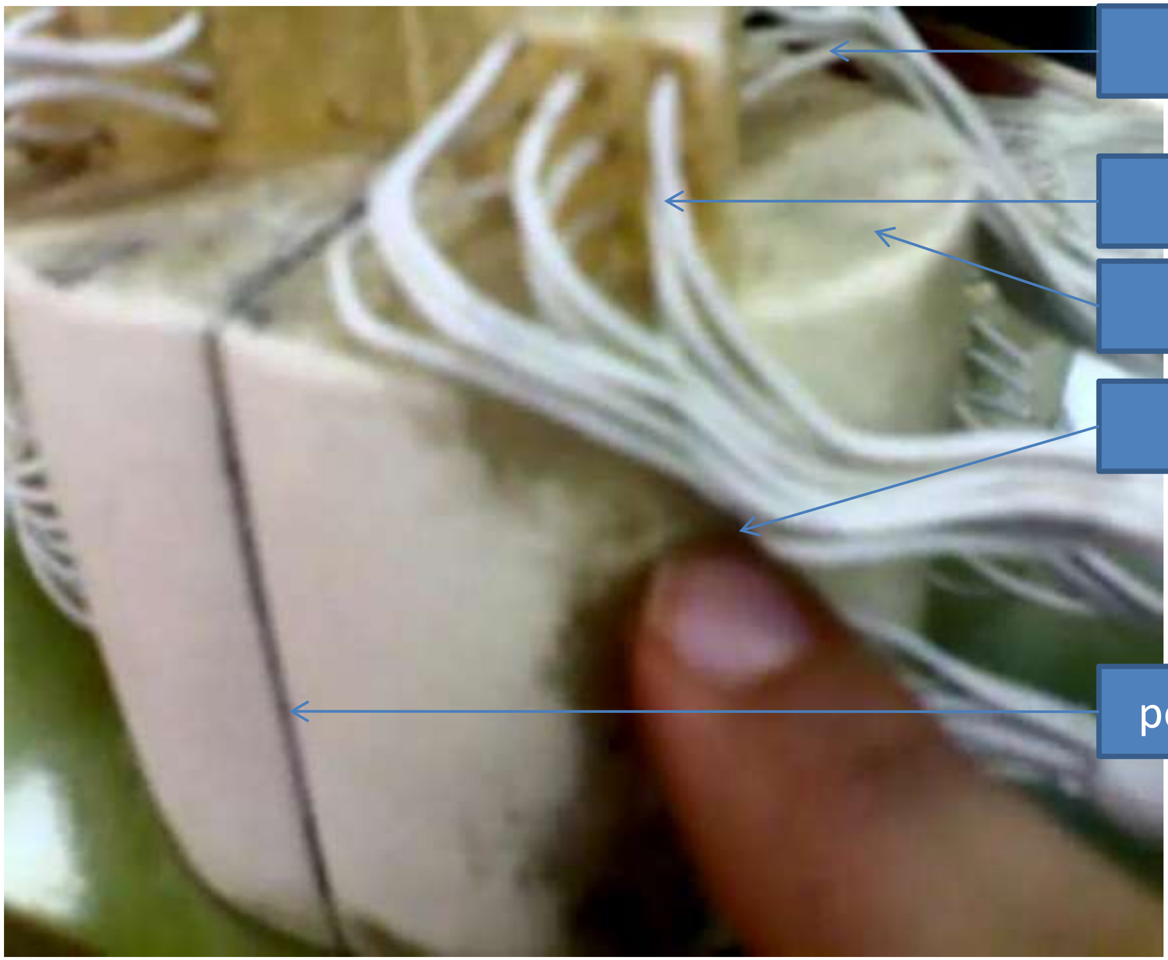
ant. Lat. sulcus

Gray mater

ant. column

ant. Median fisser

Dorsal root ganglion



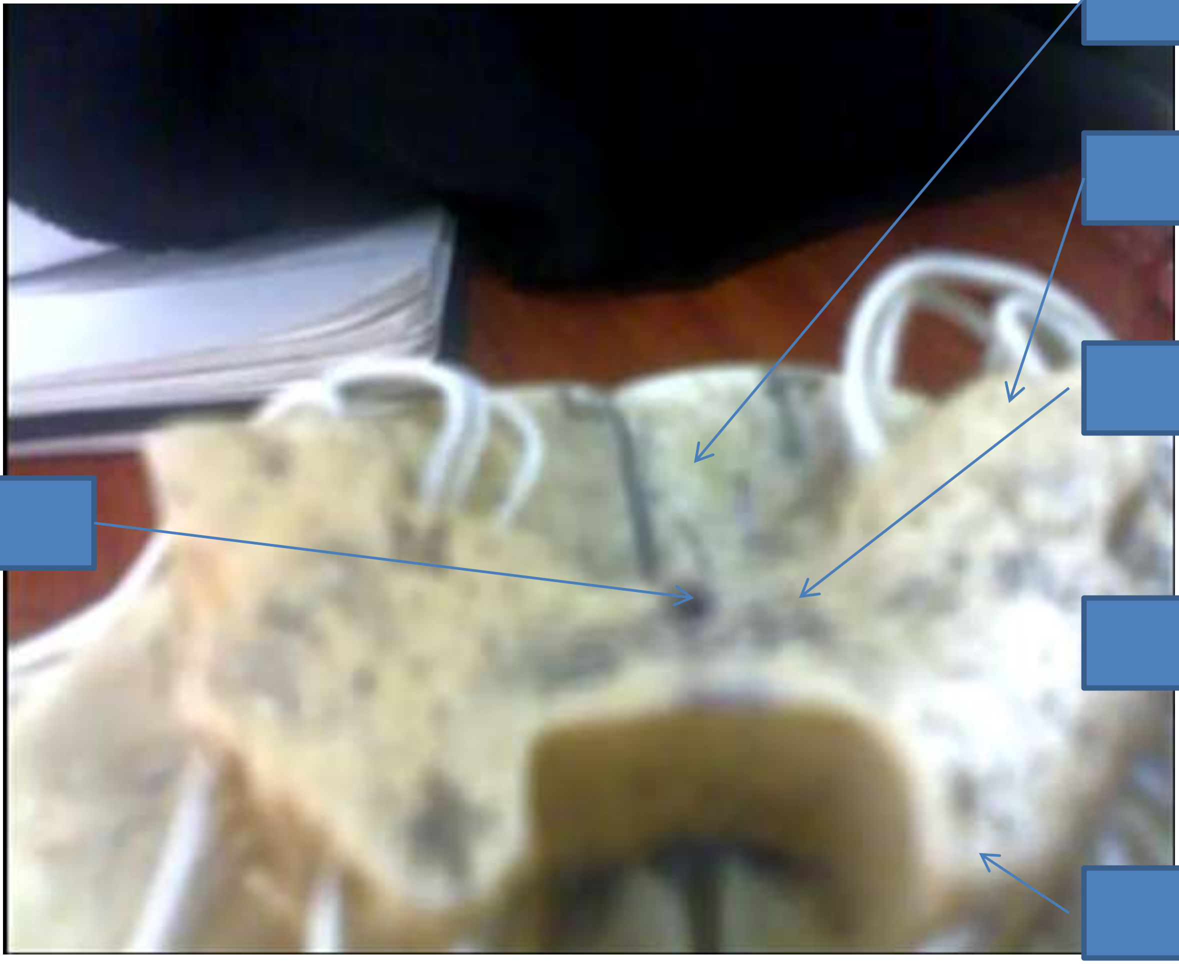
post. root

Ant. root

ant. column

ant. Lat. sulcus

post. Median sulcus



ant. column

Post h.orn

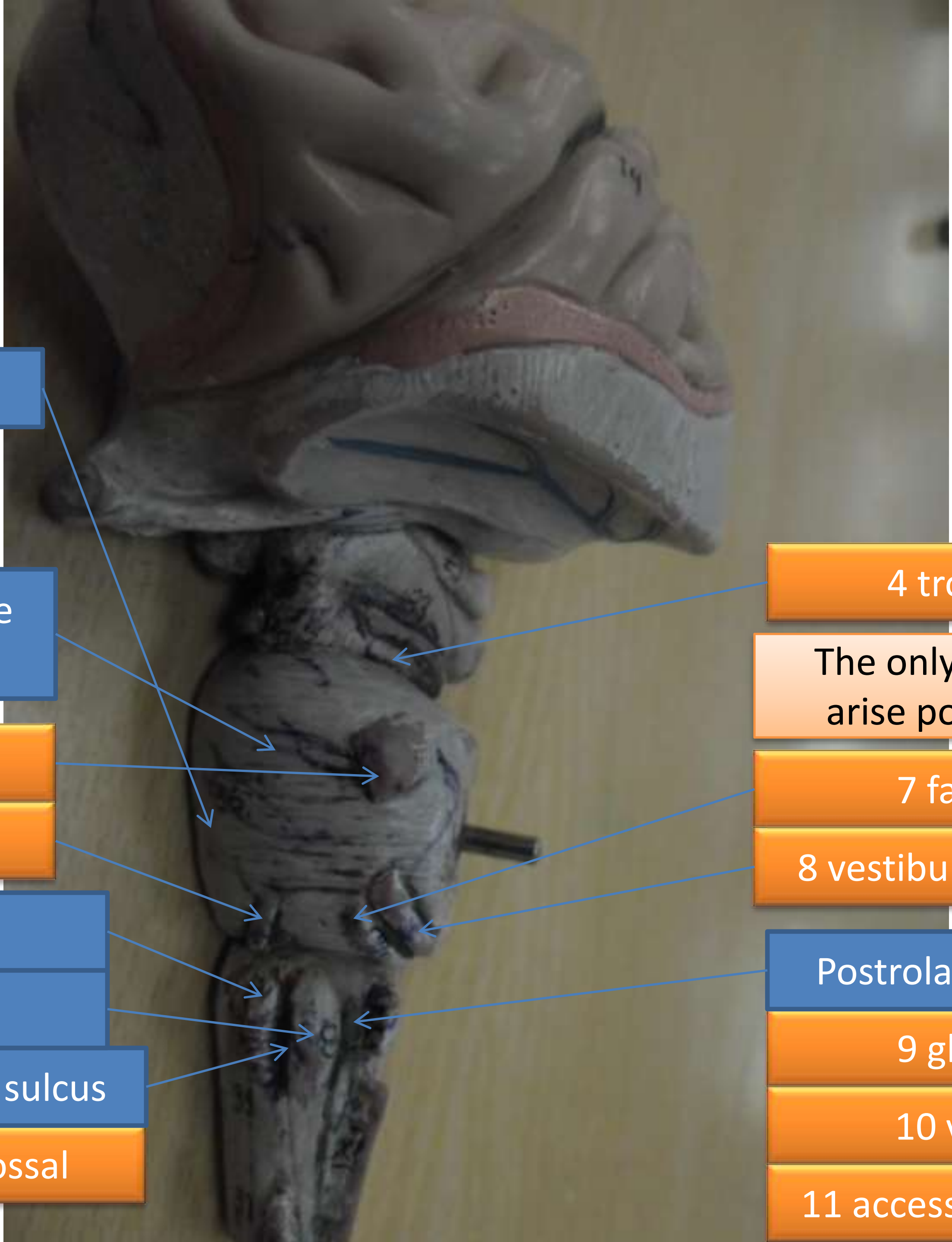
Gray comition

Central canal

Lat. horn

Ant. horn

brainstem



Basilar sulcus

Transvers ponatine fibers

5 trigaminal

6 abducent

pyramid

olive

Anterolatral sulcus

12 hypoglossal

4 trocular

The only n. which arise posteriorly

7 facial

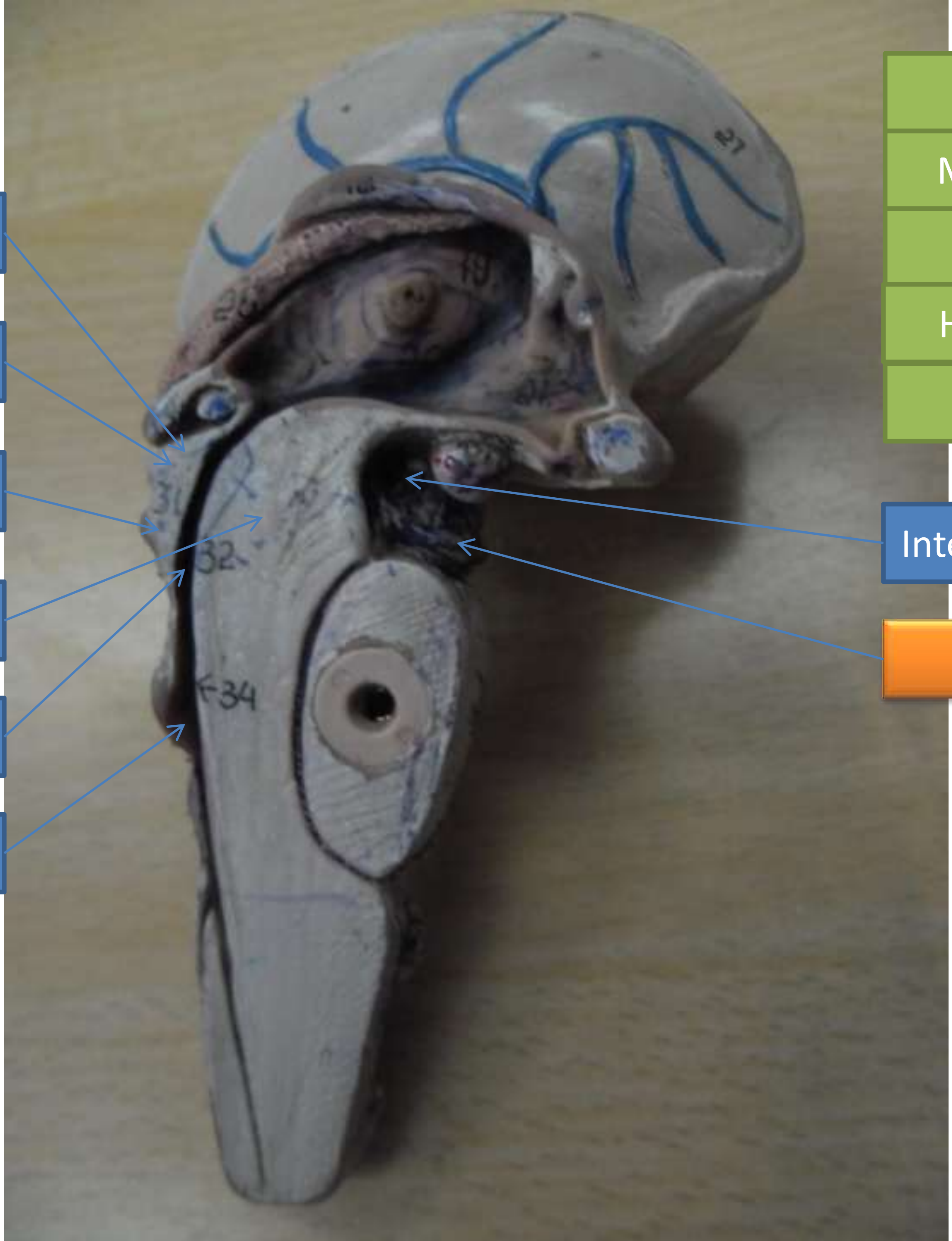
8 vestibulo-cohleal

Postrolatral sulcus

9 glossal

10 vagus

11 accessory cranial



tectum

Sup. caneculus

Inf. caneculus

tegamentum

aqueduct

4th ventricle

Crus cerebri a.

Mammelary body

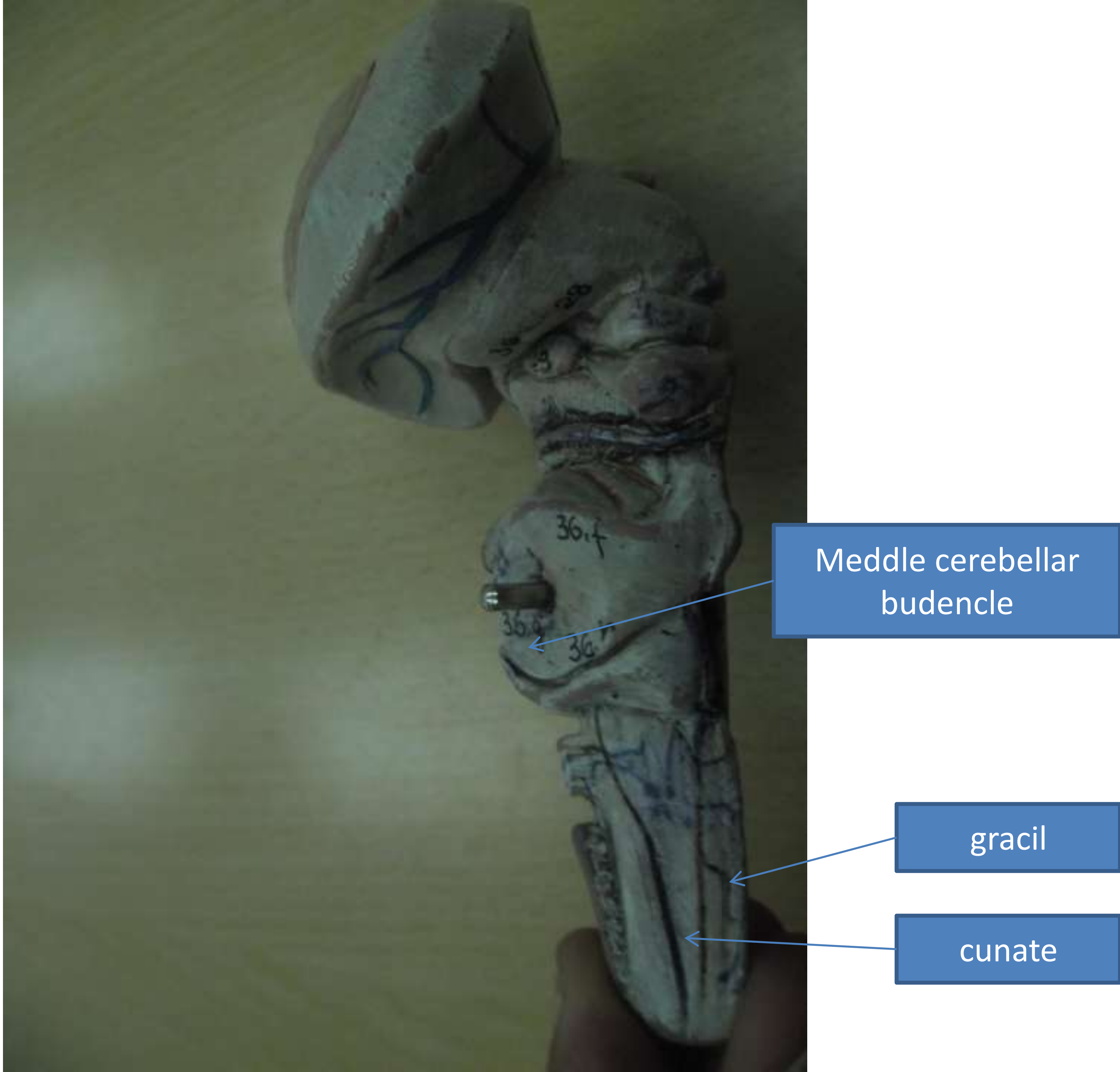
Post. comisser

Hapinar comisser

Peneal body

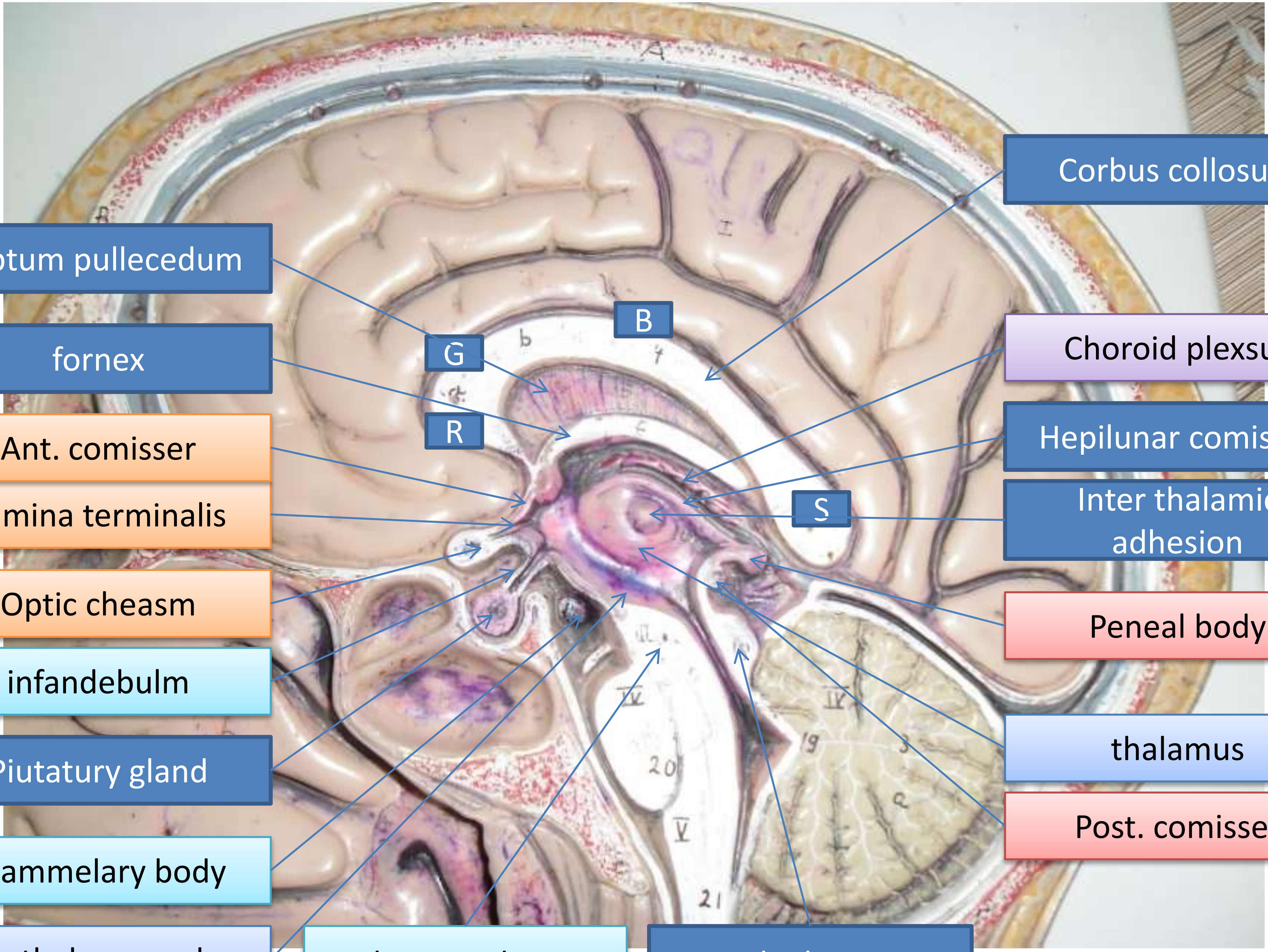
Interpeduncular fossa

3 occlumotor


36.f
36.g
36.h
Meddle cerebellar budencle
gracil
cunate

Sagetal section

3rd ventrical → floor | roof | Lat. w | Ant. w | Post. w



Corbus collosum

Septum pullecedum

fornex

Choroid plexsus

Ant. comisser

Hepilunar comisser

Lamina terminalis

Inter thalamic adhesion

Optic cheasm

Peneal body

infandebulm

Piutatury gland

thalamus

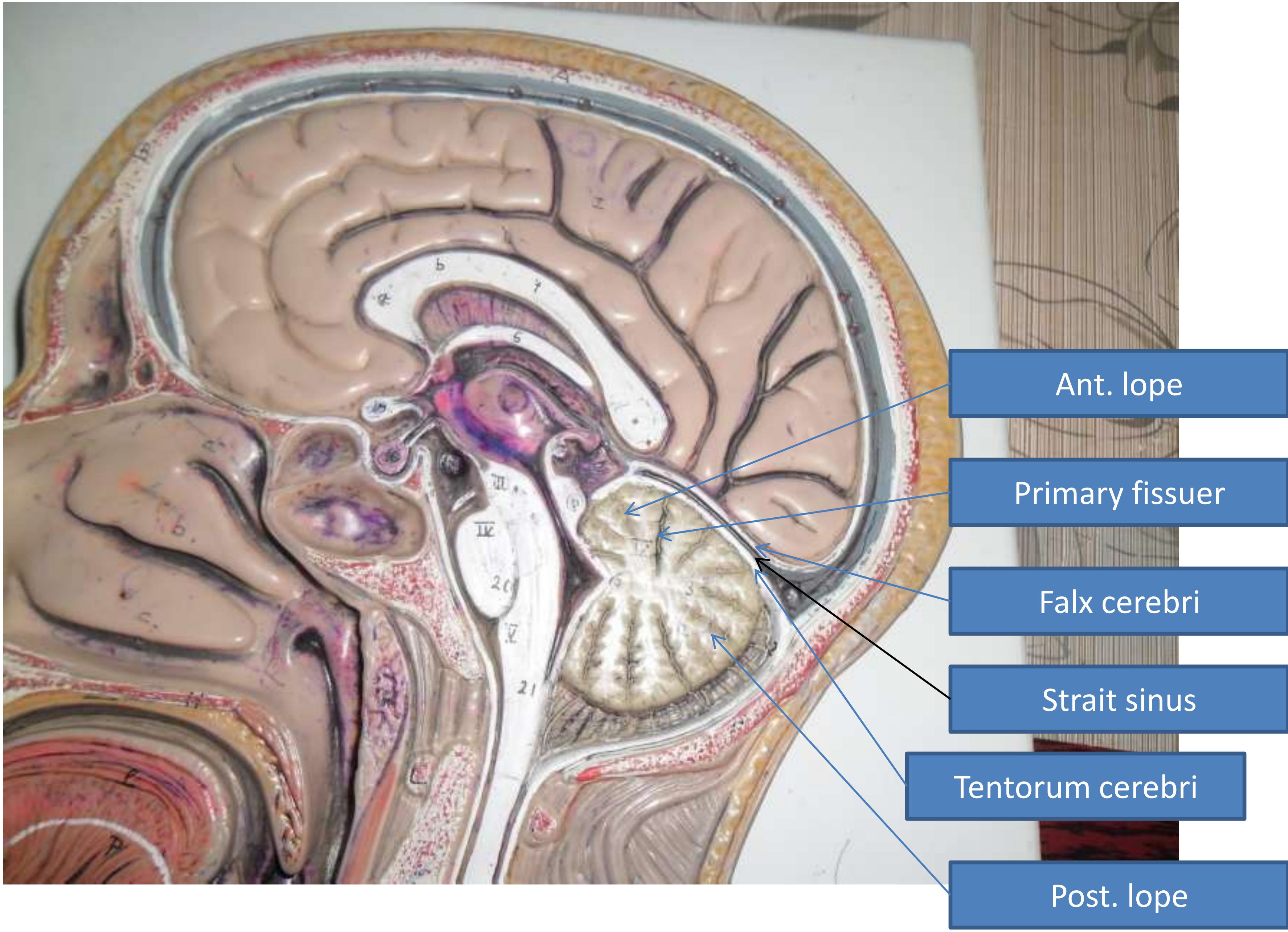
Post. comisser

Mammelary body

Hypothalamus sulcus

tegamentum

tectum



Ant. lope

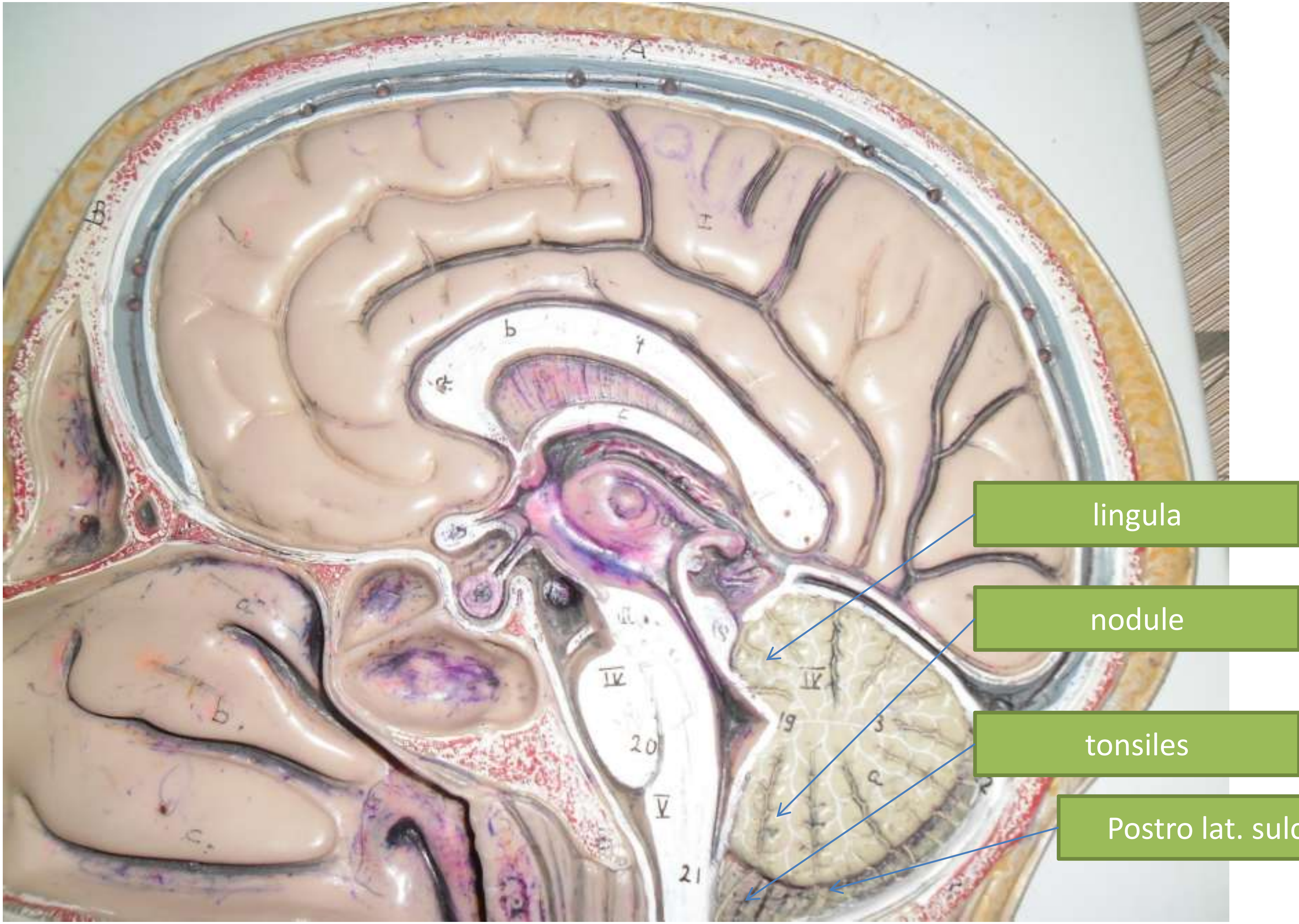
Primary fissuer

Falx cerebri

Strait sinus

Tentorum cerebri

Post. lope


A
B
I
b
f
a
c
IV
18
IV
19
3
20
V
21
a
b
c

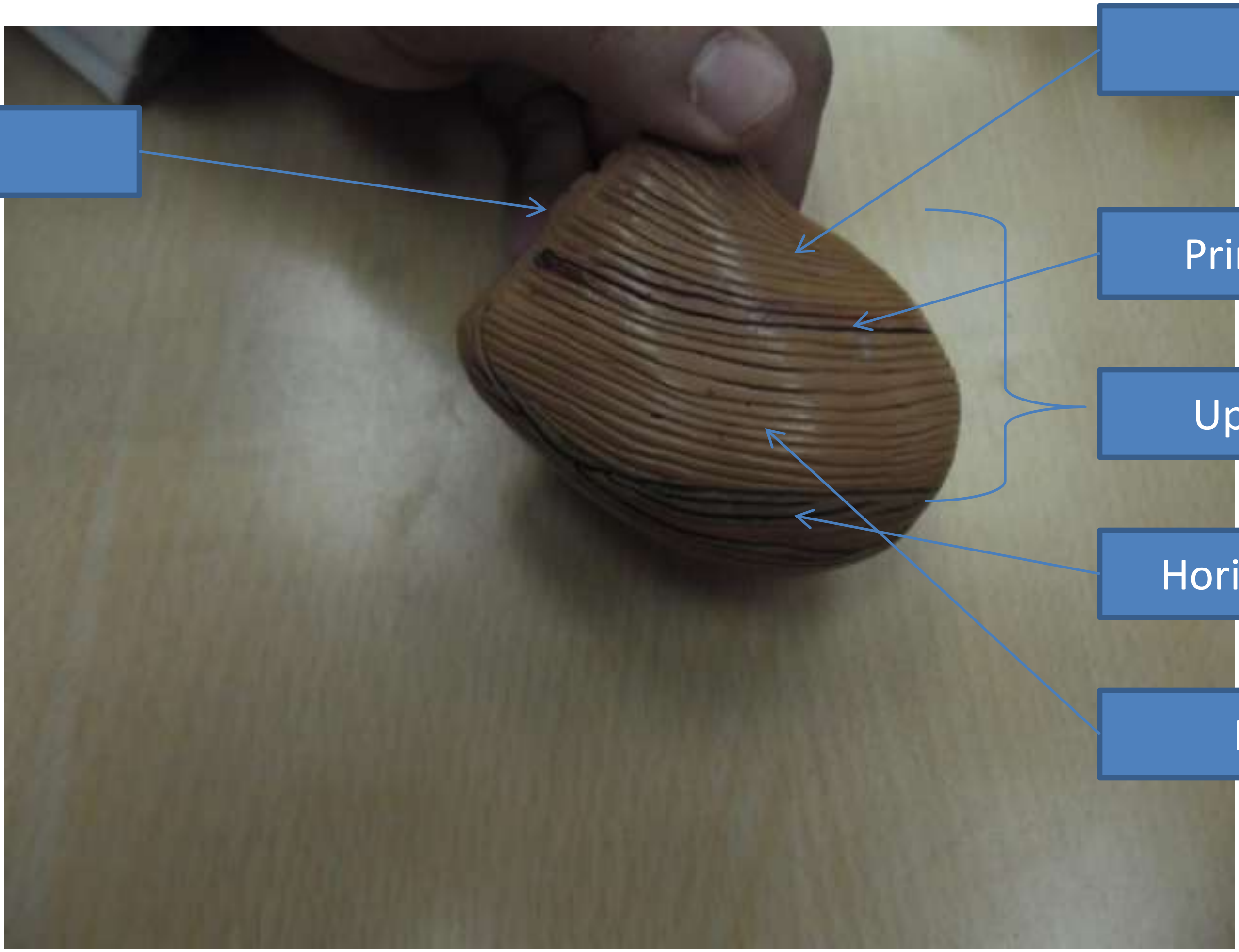
lingula

nodule

tonsiles

Postro lat. sulc

cerebellum



vermis

Ant. lope

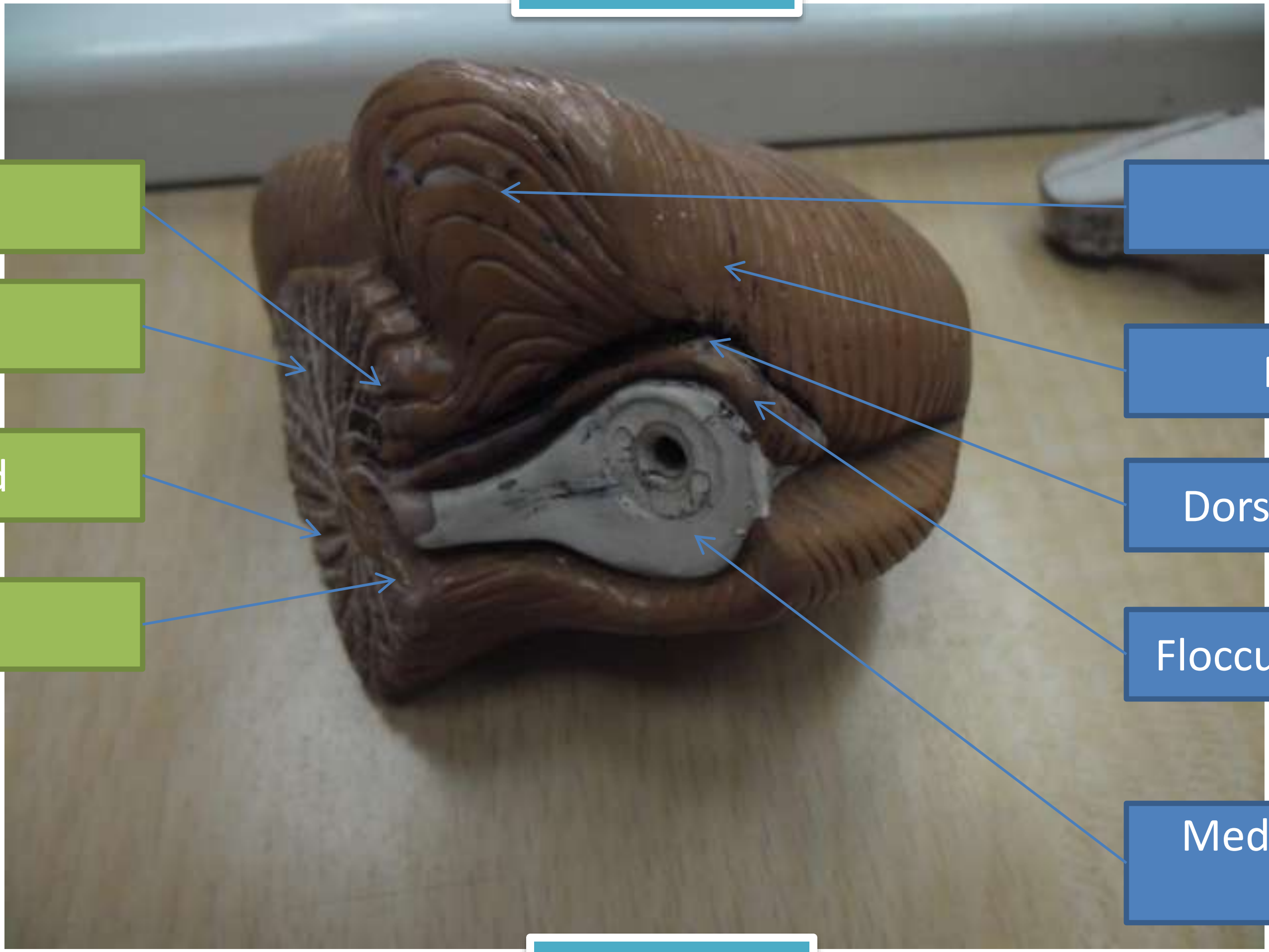
Primery fissuer

Upper surface

Horizontal fissuer

Post. lope

inferior



4 nudule

3 Uvela

2 pyramid

1 Tuber

tonsil

Post. lope

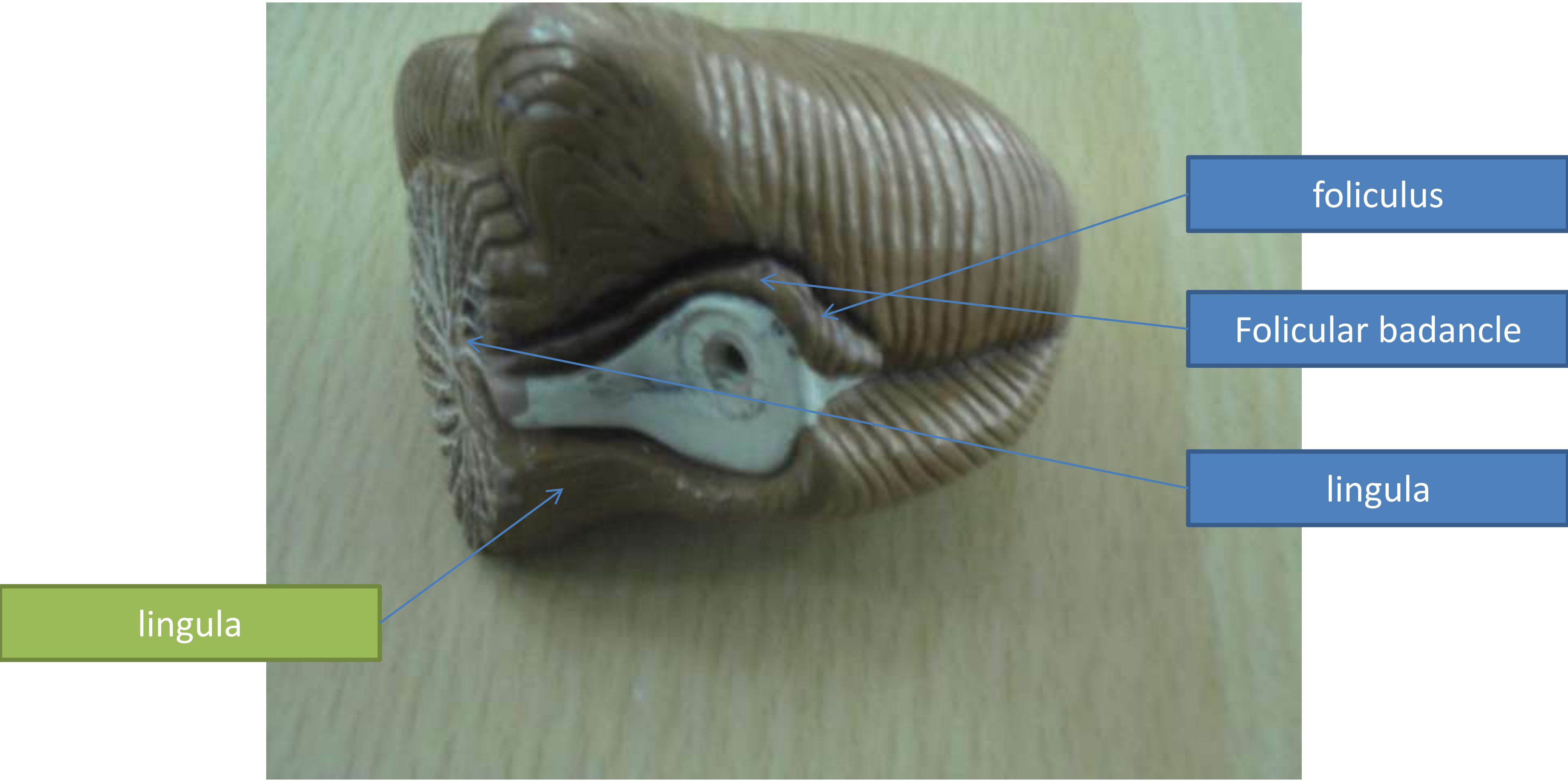
Dorsolatral fissuer

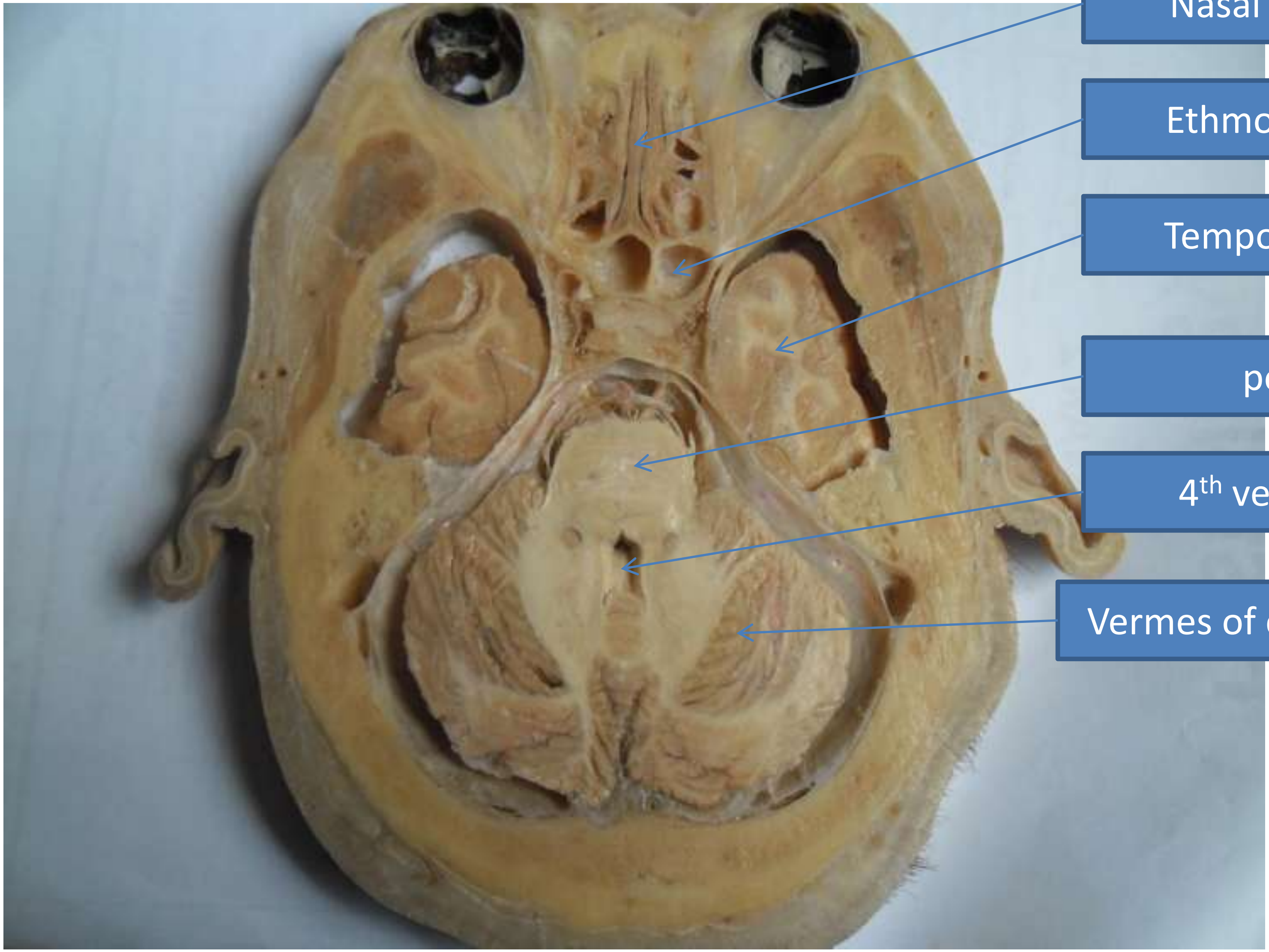
Flocculonodular lope

Meddle cerebellar bedancle

superior

Central lupule


foliculus
Folicular badancle
lingula
lingula



Nasal sebtum

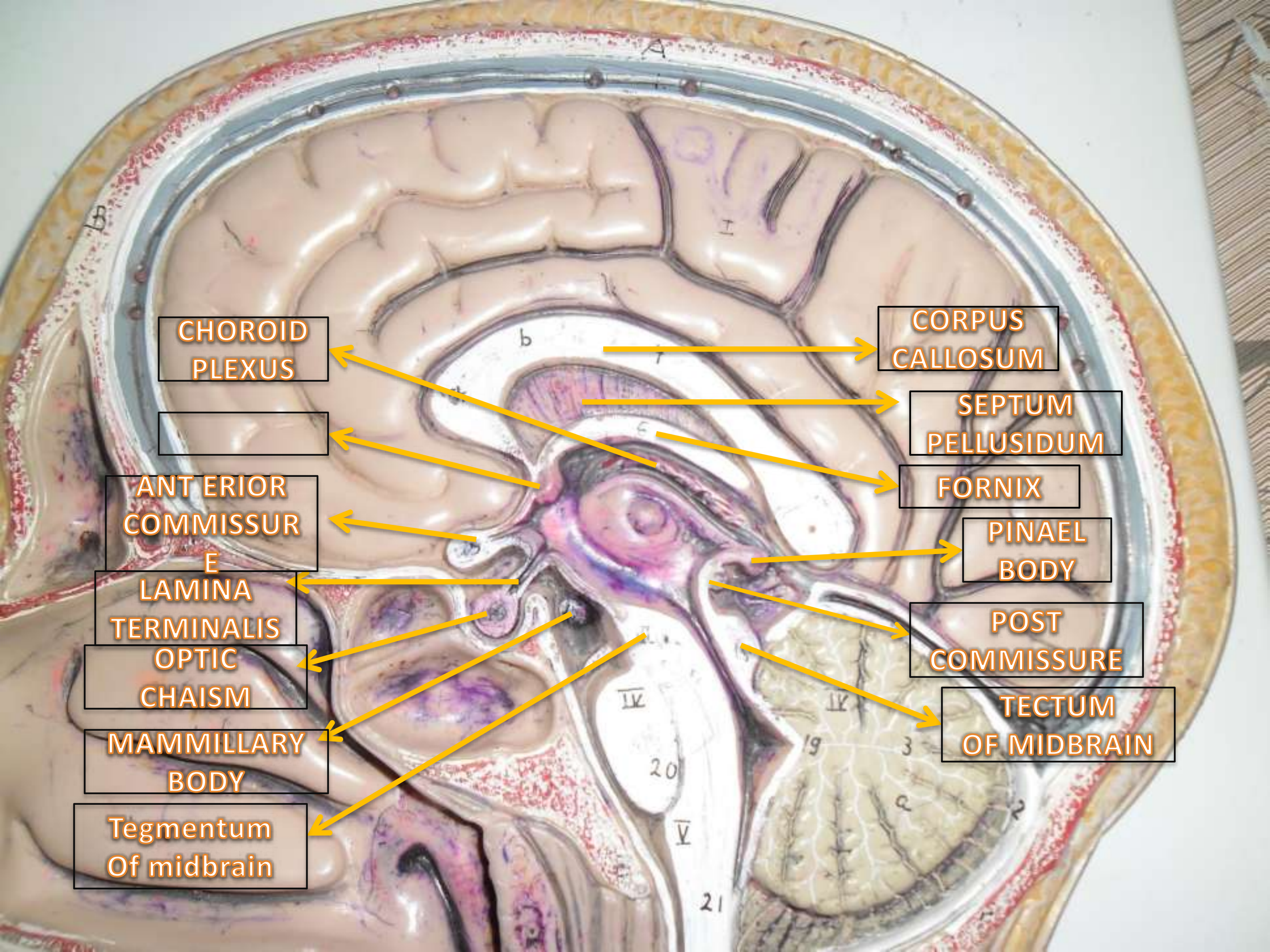
Ethmoid sinus

Temporal lope

pons

4th ventrecle

Vermes of cerebellum



CHOROID PLEXUS

ANTERIOR COMMISSURE

LAMINA TERMINALIS

OPTIC CHAISM

MAMMILLARY BODY

Tegmentum Of midbrain

CORPUS CALLOSUM

SEPTUM PELLUSIDUM

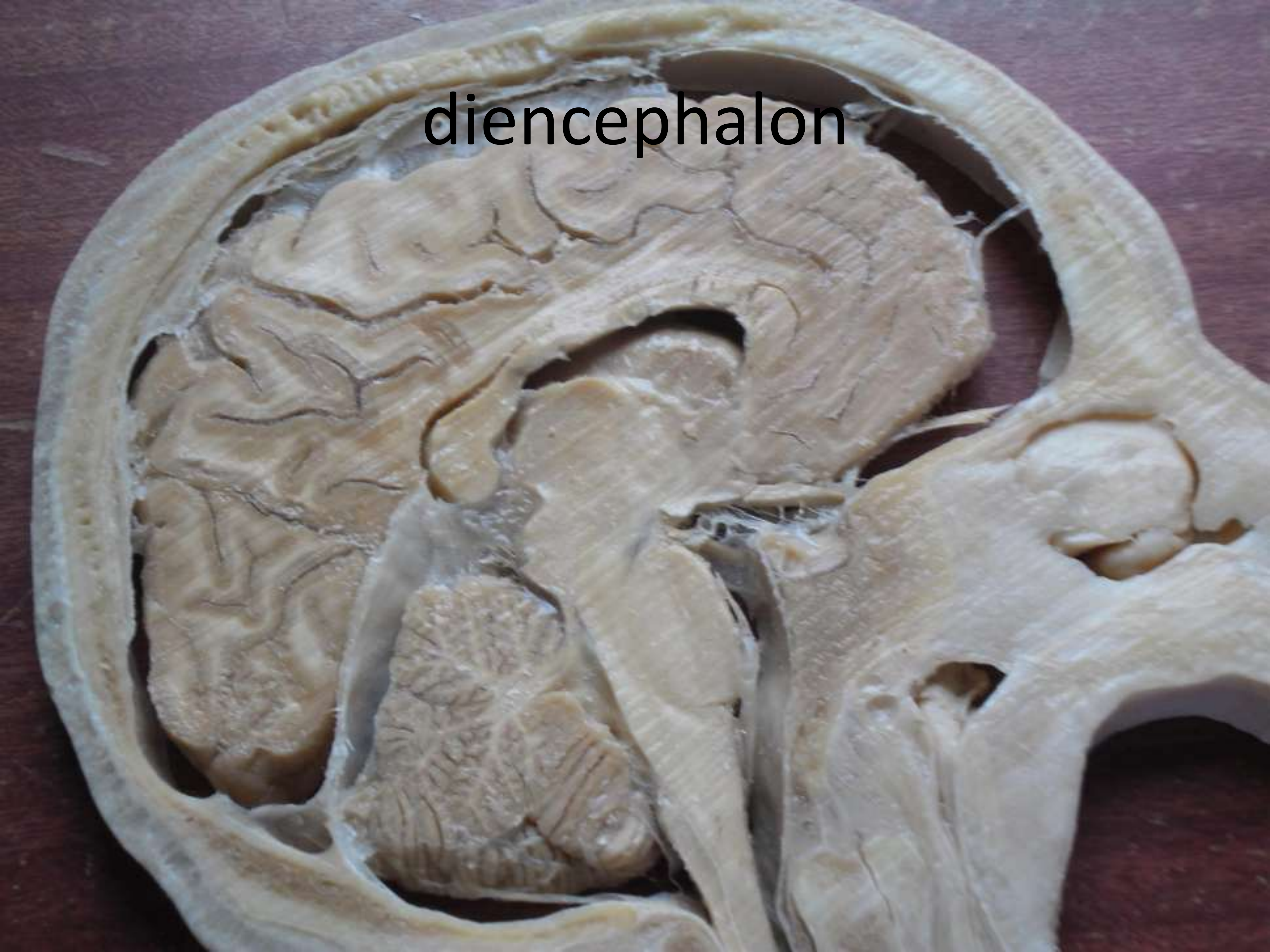
FORNIX

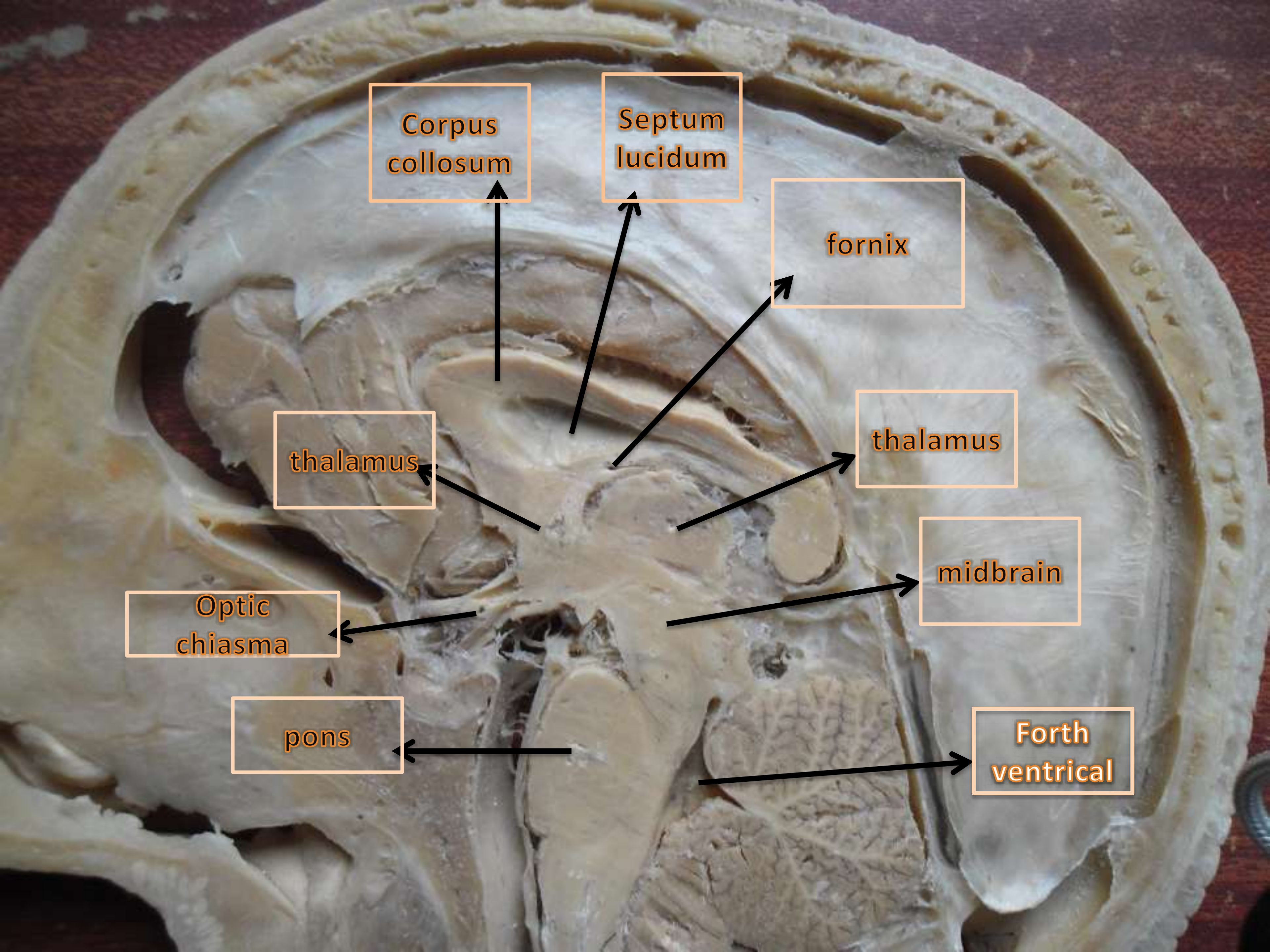
PINAEL BODY

POST COMMISSURE

TECTUM OF MIDBRAIN

diencephalon





Corpus collosum

Septum lucidum

fornix

thalamus

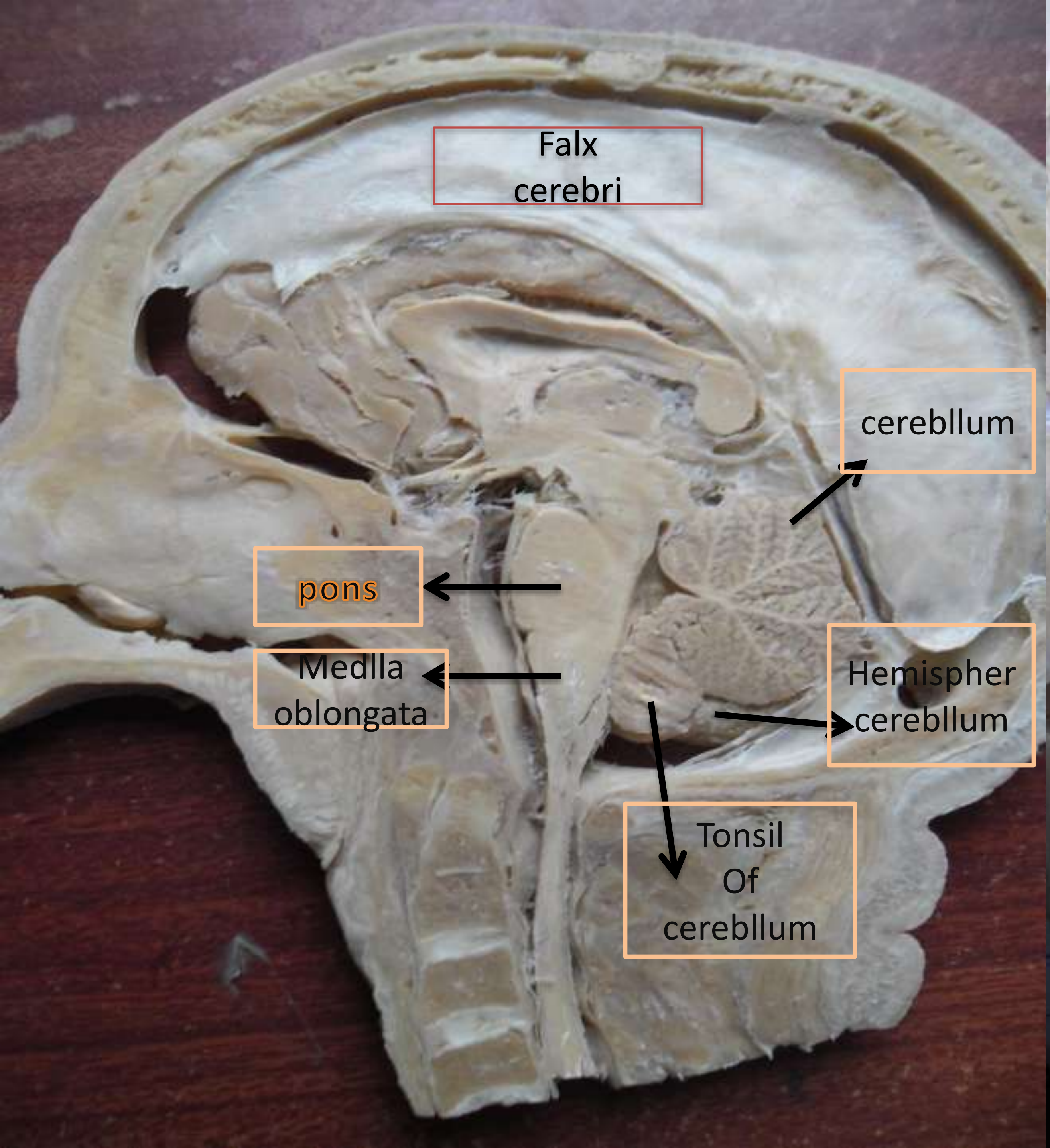
thalamus

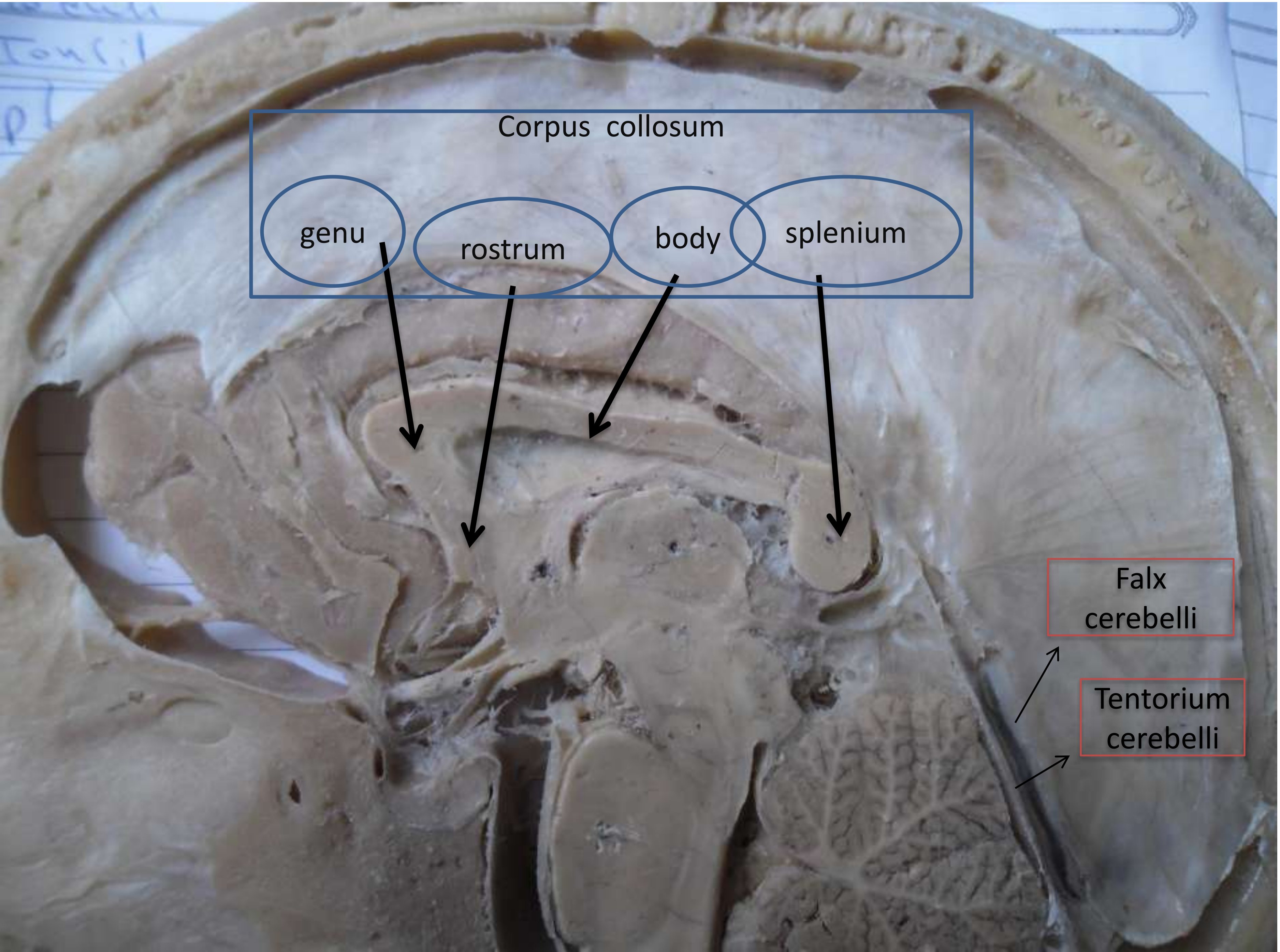
midbrain

Optic chiasma

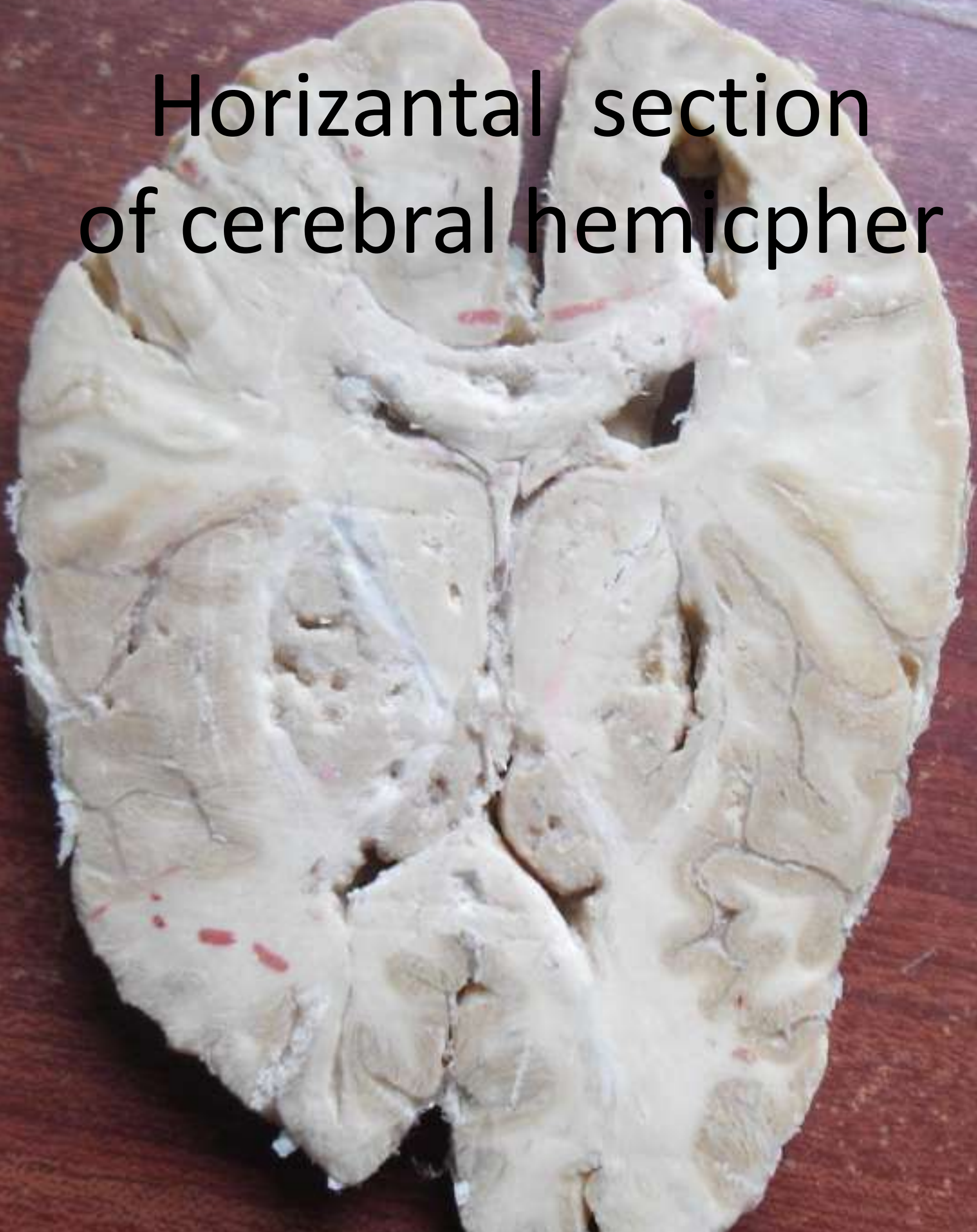
pons

Forth ventrical

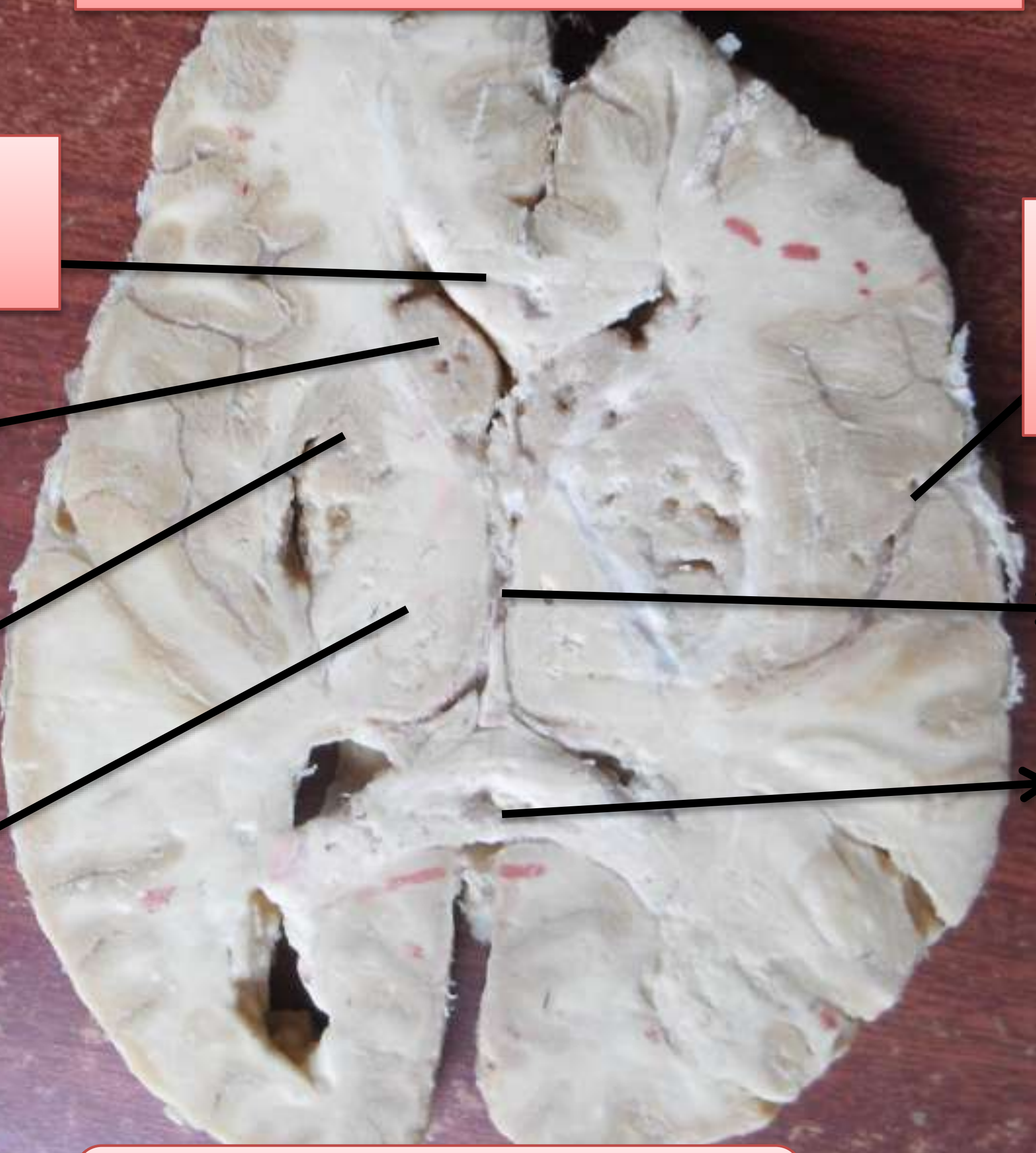

Falx cerebri
cerebllum
pons
Medlla oblongata
Hemispher cerebllum
Tonsil Of cerebllum


Corpus collosum
genu
rostrum
body
splenium
Falx cerebelli
Tentorium cerebelli

Horizantal section of cerebral hemicpher



Anterior side



Forceps minor

Head of caudate nucleus

Lentiform nucleus

thalamus

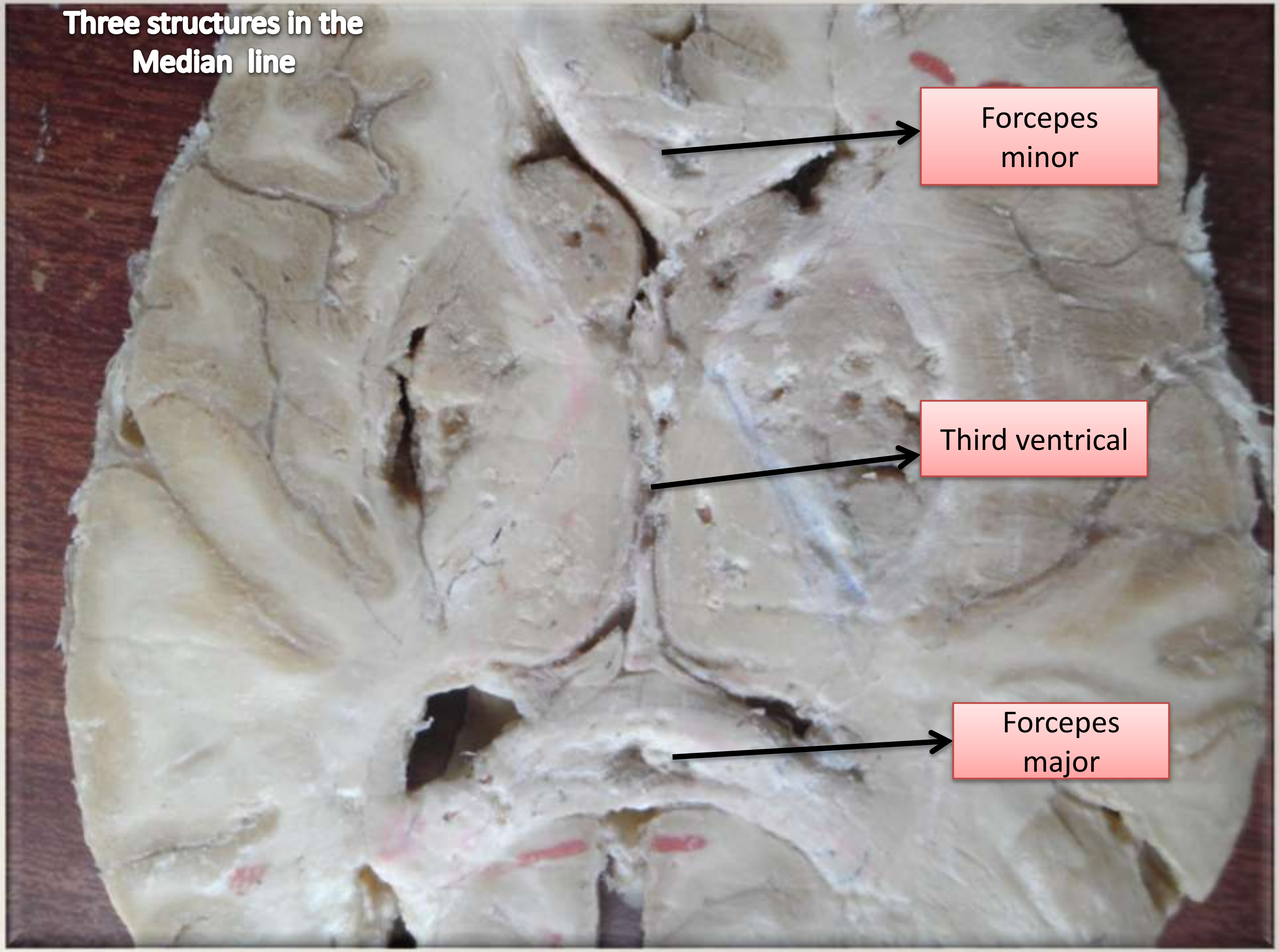
insula

Third Ventrical Between two thalami

Forceps major

Posterior side

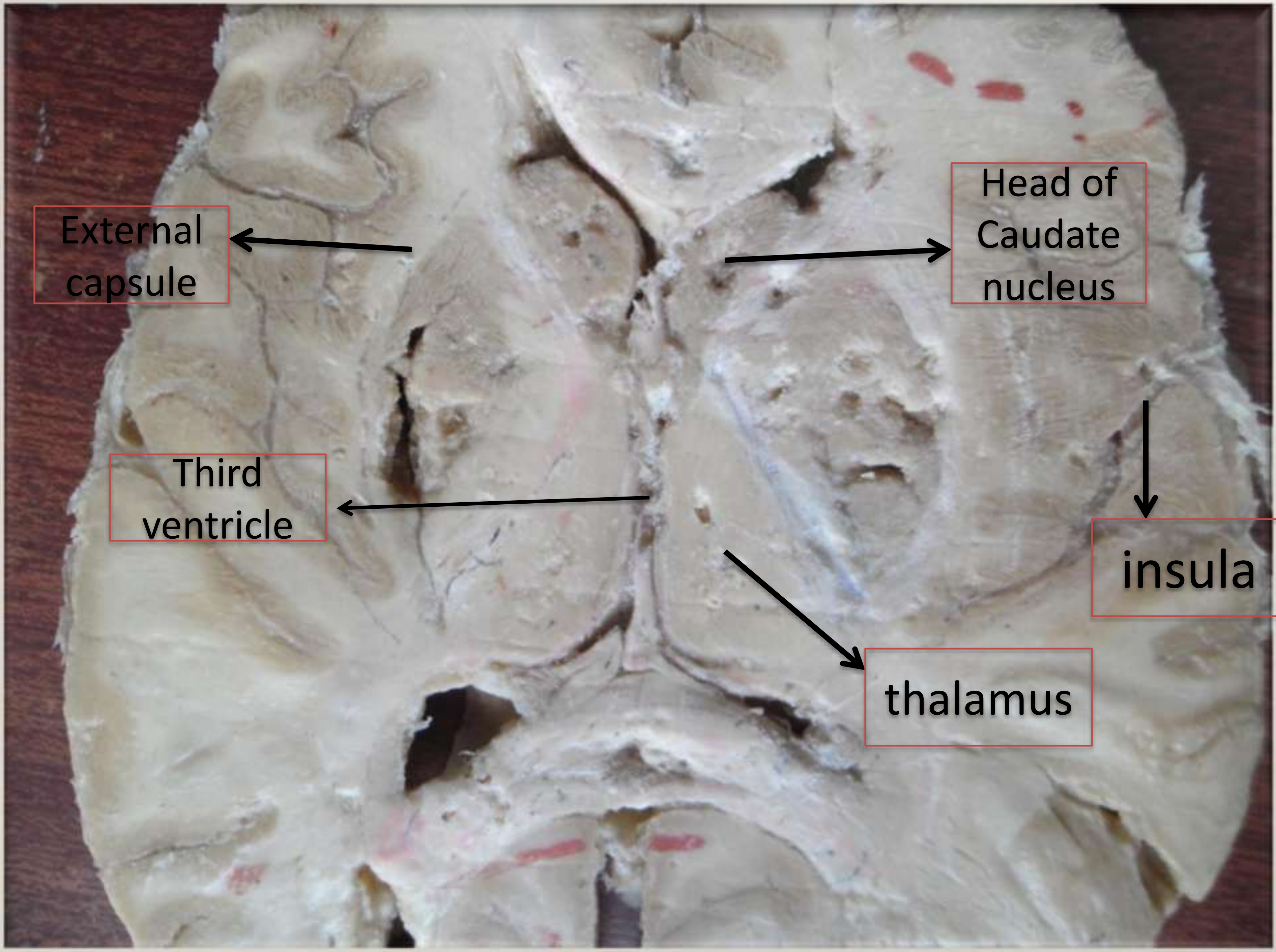
Three structures in the Median line

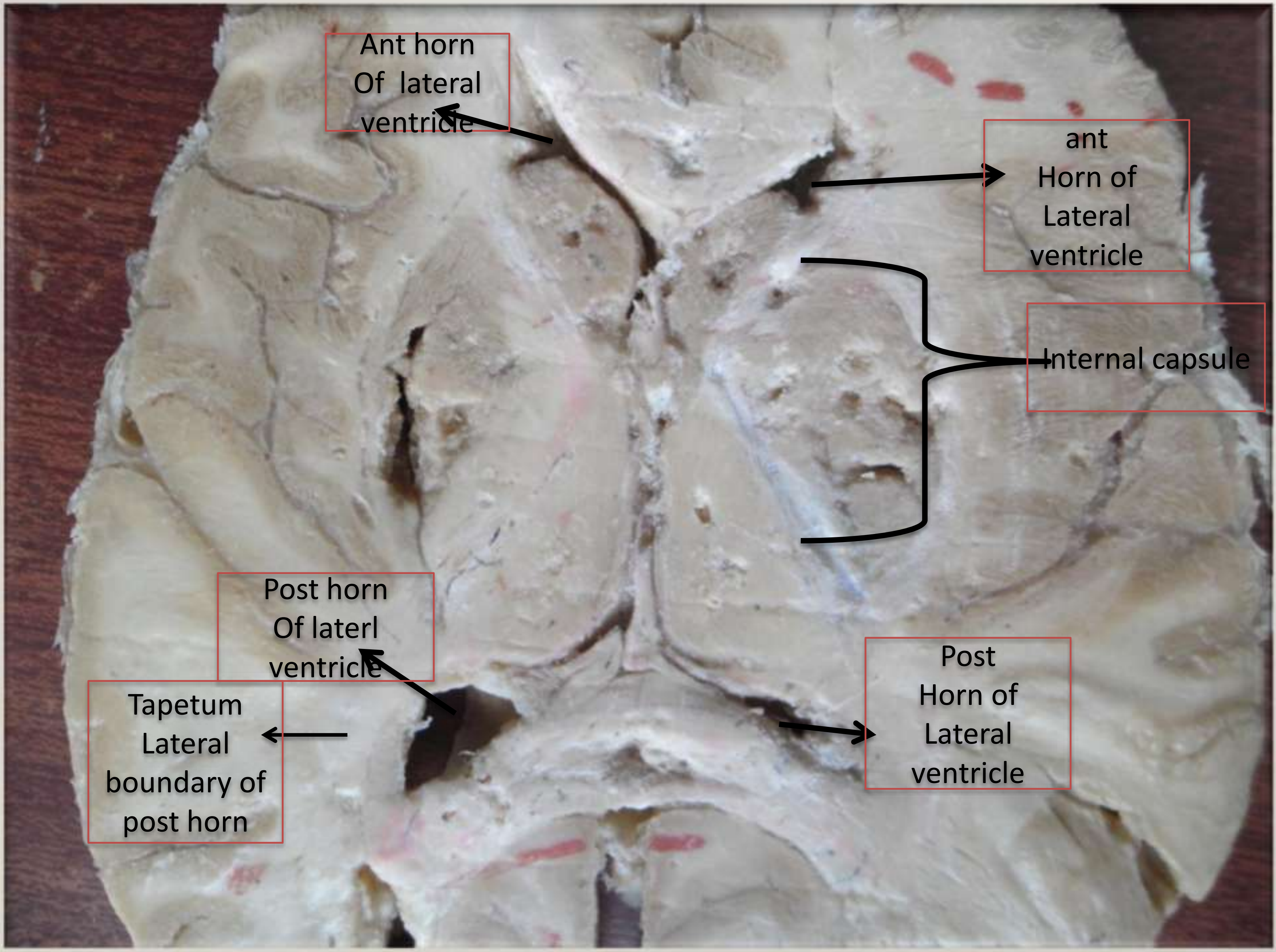


Forcepes minor

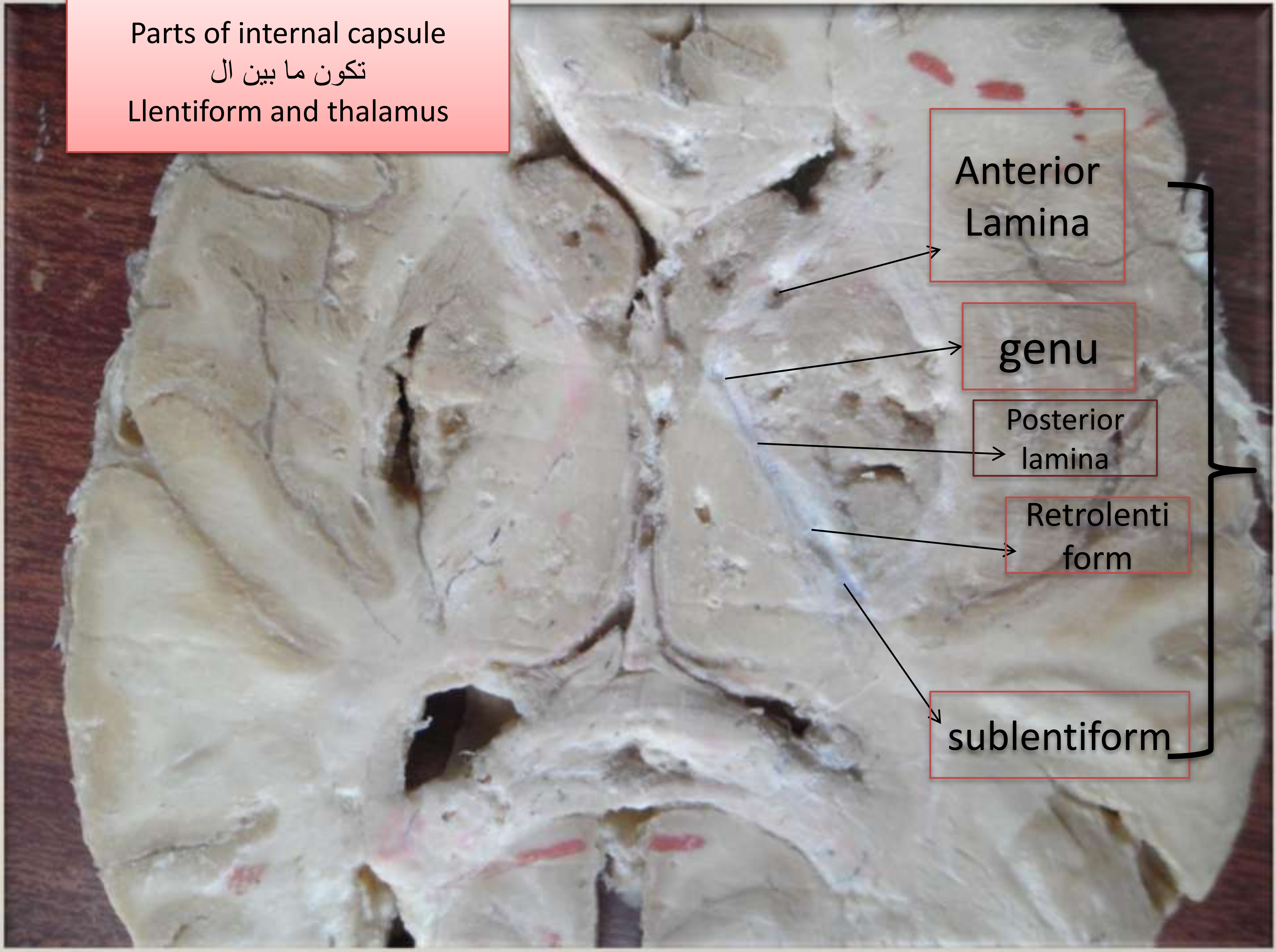
Third ventrical

Forcepes major


External capsule
Head of Caudate nucleus
Third ventricle
insula
thalamus


Ant horn
Of lateral
ventricle
ant
Horn of
Lateral
ventricle
Internal capsule
Post horn
Of laterl
ventricle
Tapetum
Lateral
boundary of
post horn
Post
Horn of
Lateral
ventricle

Parts of internal capsule
تكون ما بين ال
Llentiform and thalamus



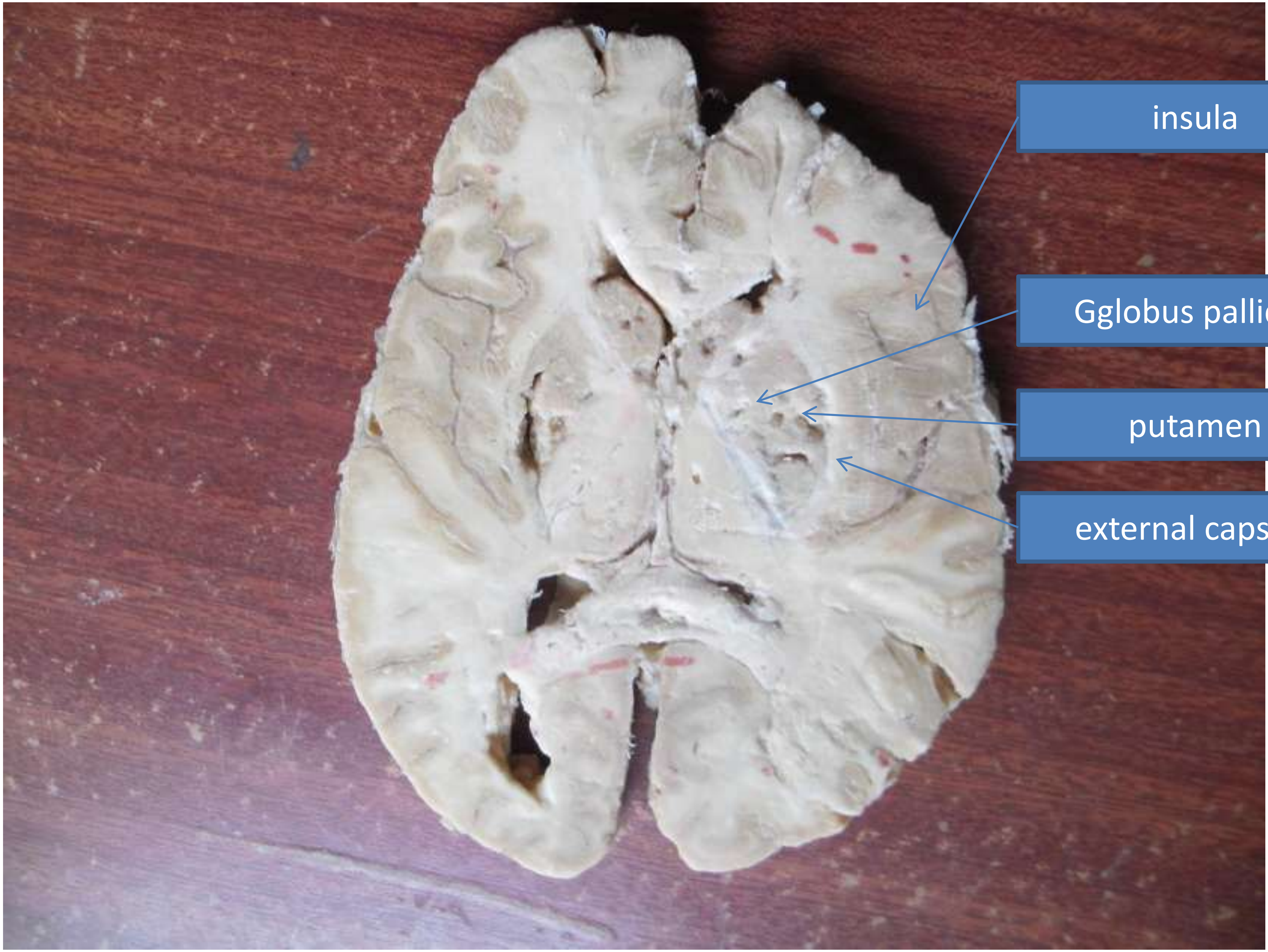
Anterior Lamina

genu

Posterior lamina

Retrolenti form

sublentiform



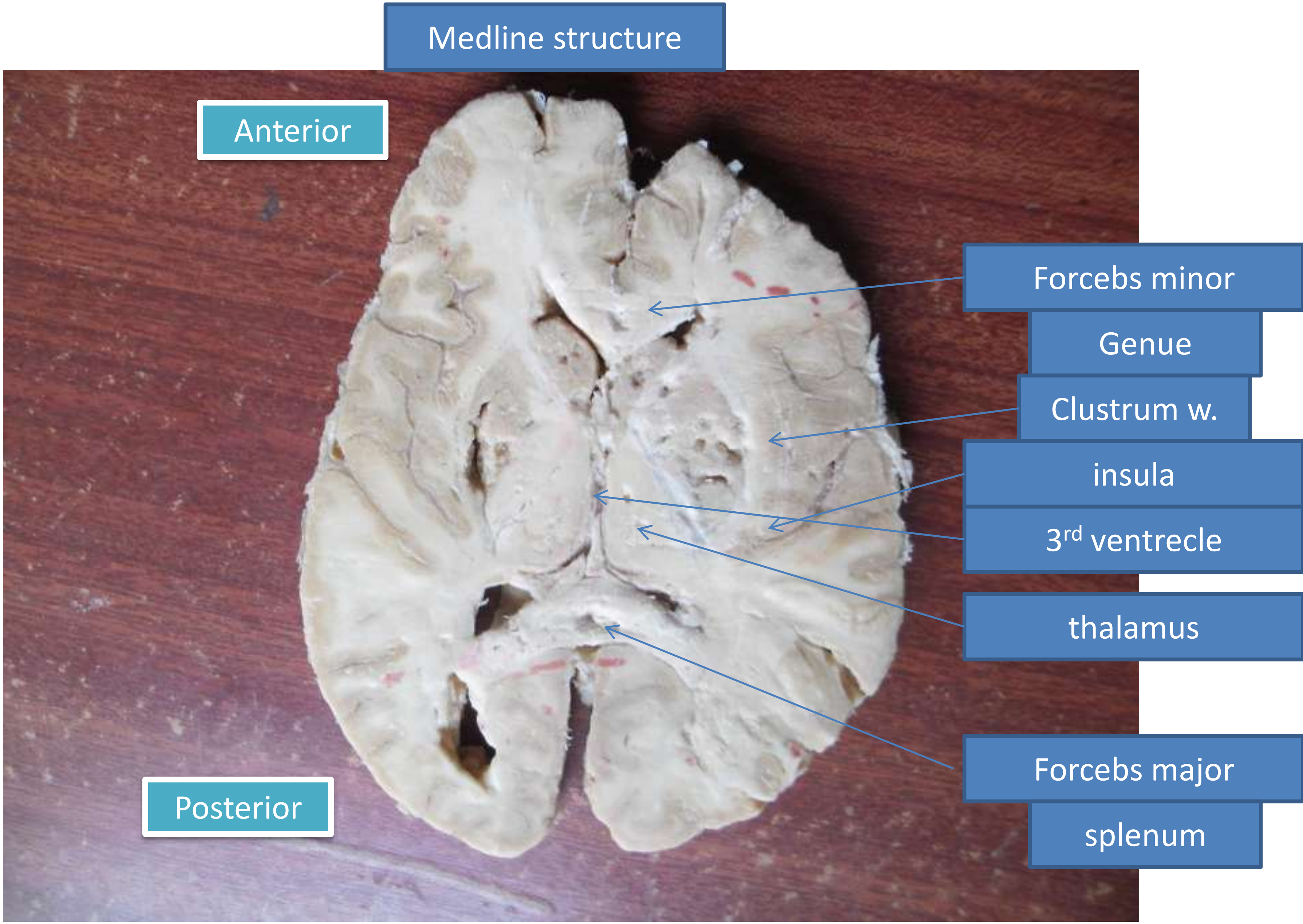
insula

Gglobus pallidus

putamen

external capsule

At the level of corbus collosum



Medline structure

Anterior

Forcebs minor

Genue

Clustrum w.

insula

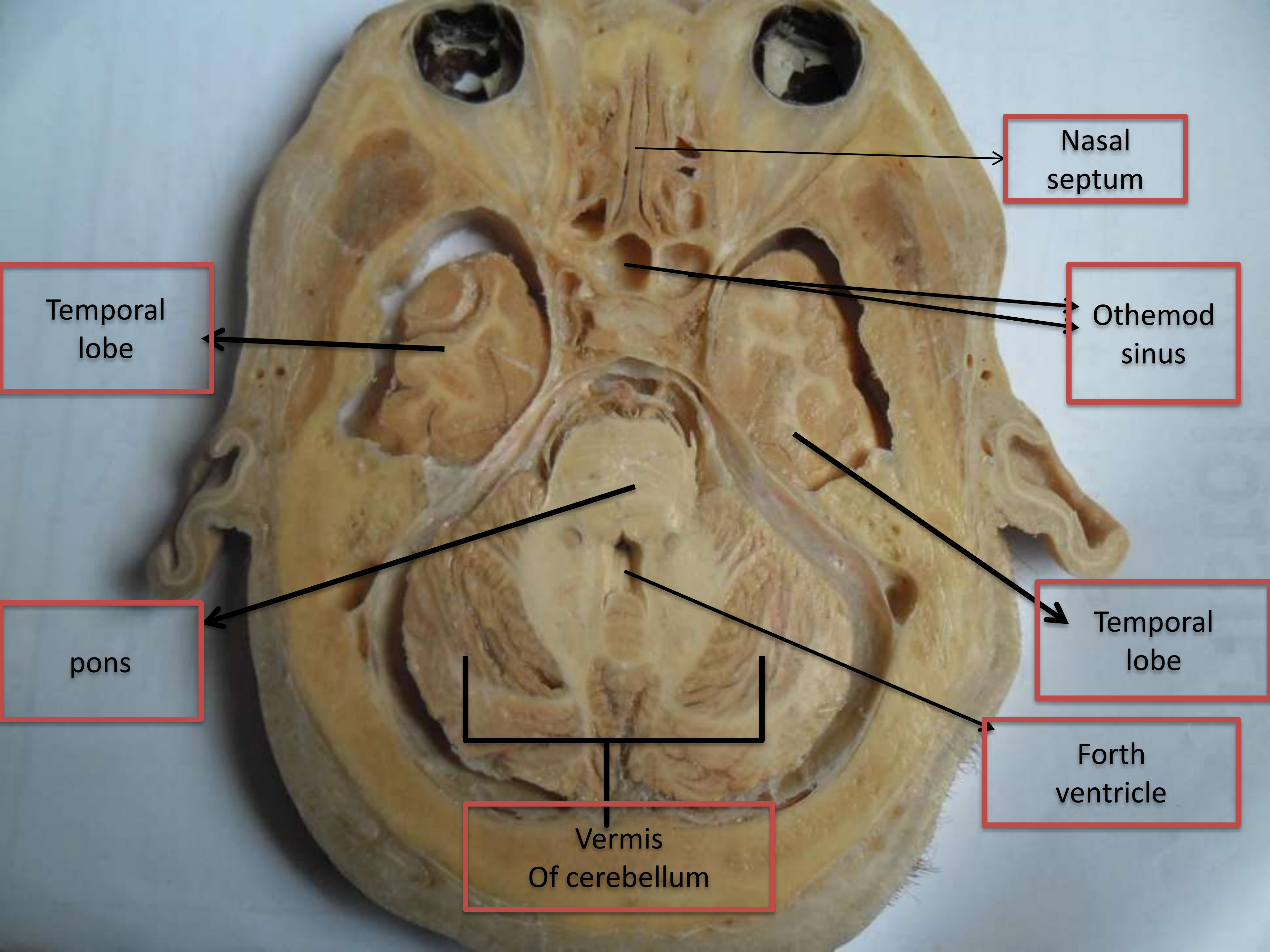
3rd ventrecle

thalamus

Forcebs major

splenum

Posterior



Nasal septum

Temporal lobe

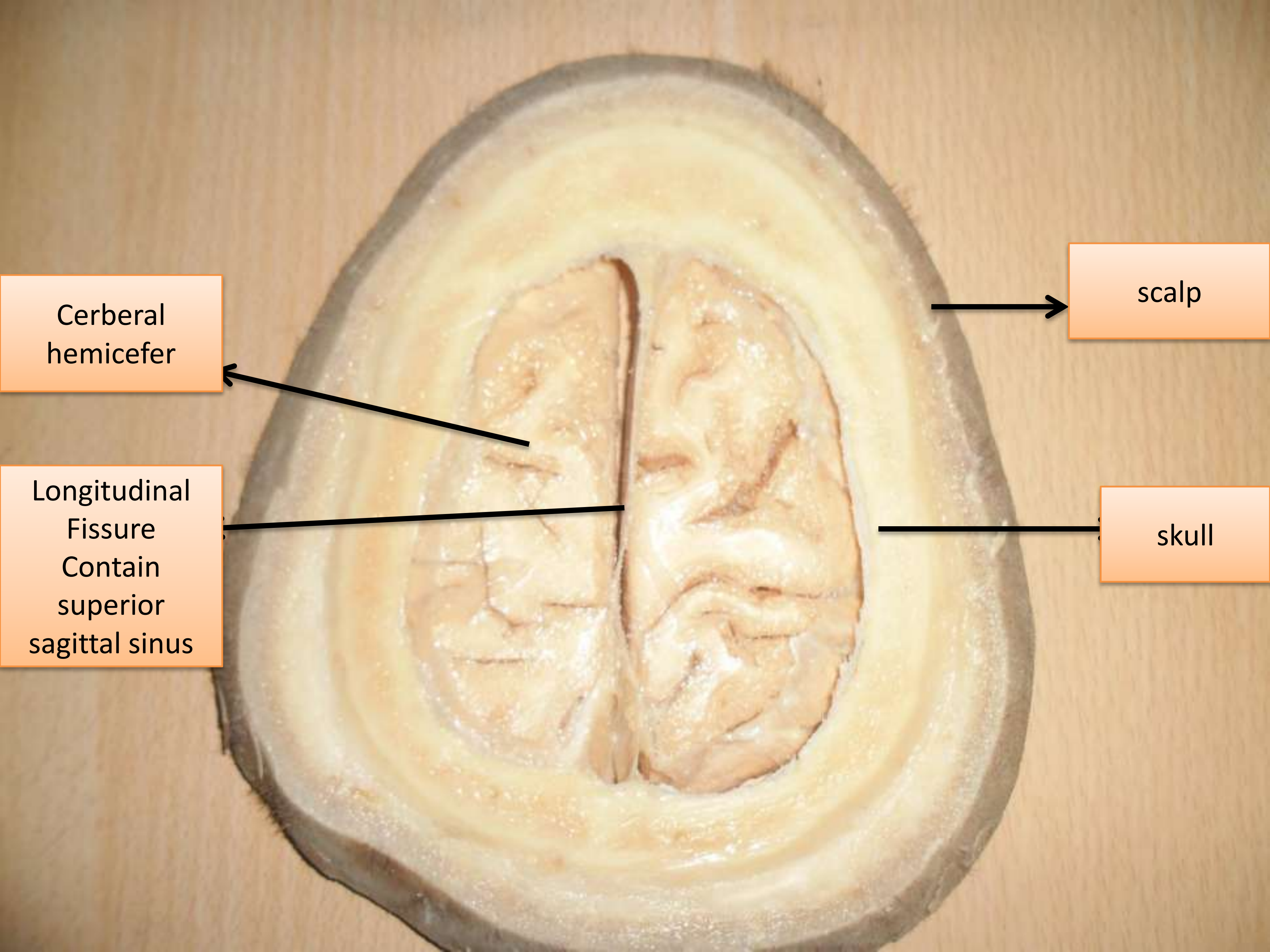
Othemod sinus

Temporal lobe

pons

Forth ventricle

Vermis Of cerebellum

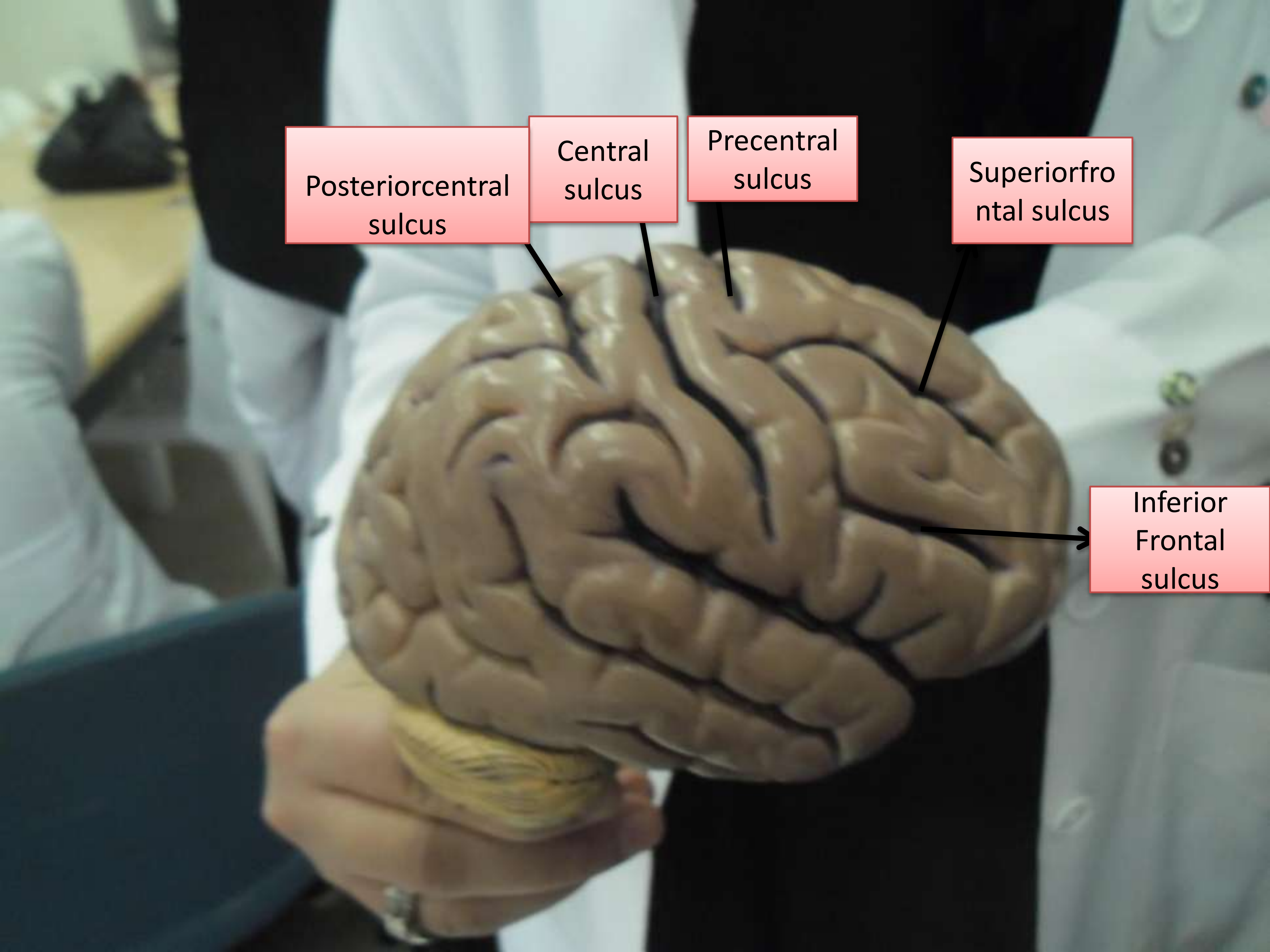


Cerberal hemicefer

Longitudinal Fissure Contain superior sagittal sinus

scalp

skull



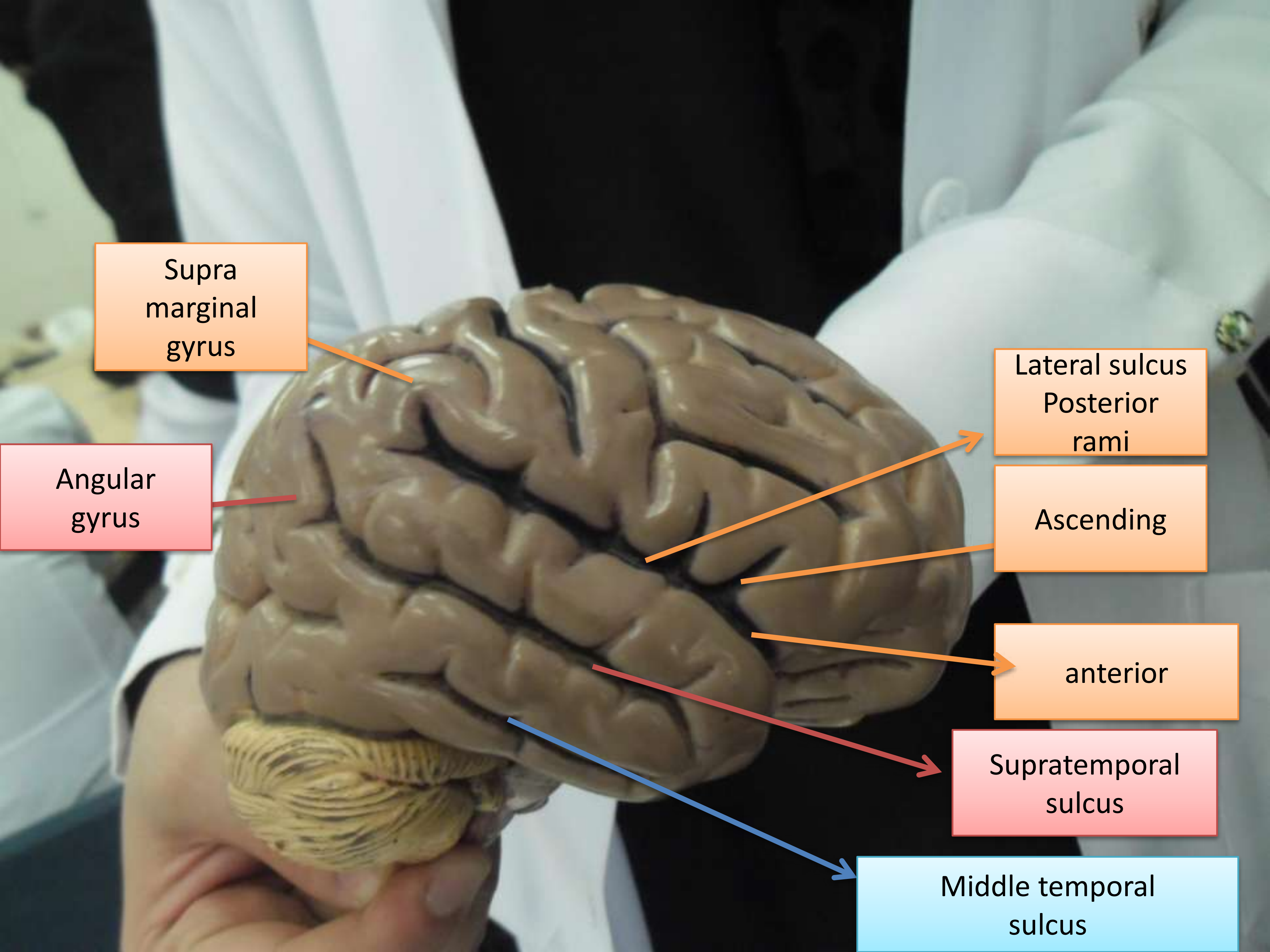
Posteriorcentral sulcus

Central sulcus

Precentral sulcus

Superiorfrontal sulcus

Inferior Frontal sulcus



Supra marginal gyrus

Angular gyrus

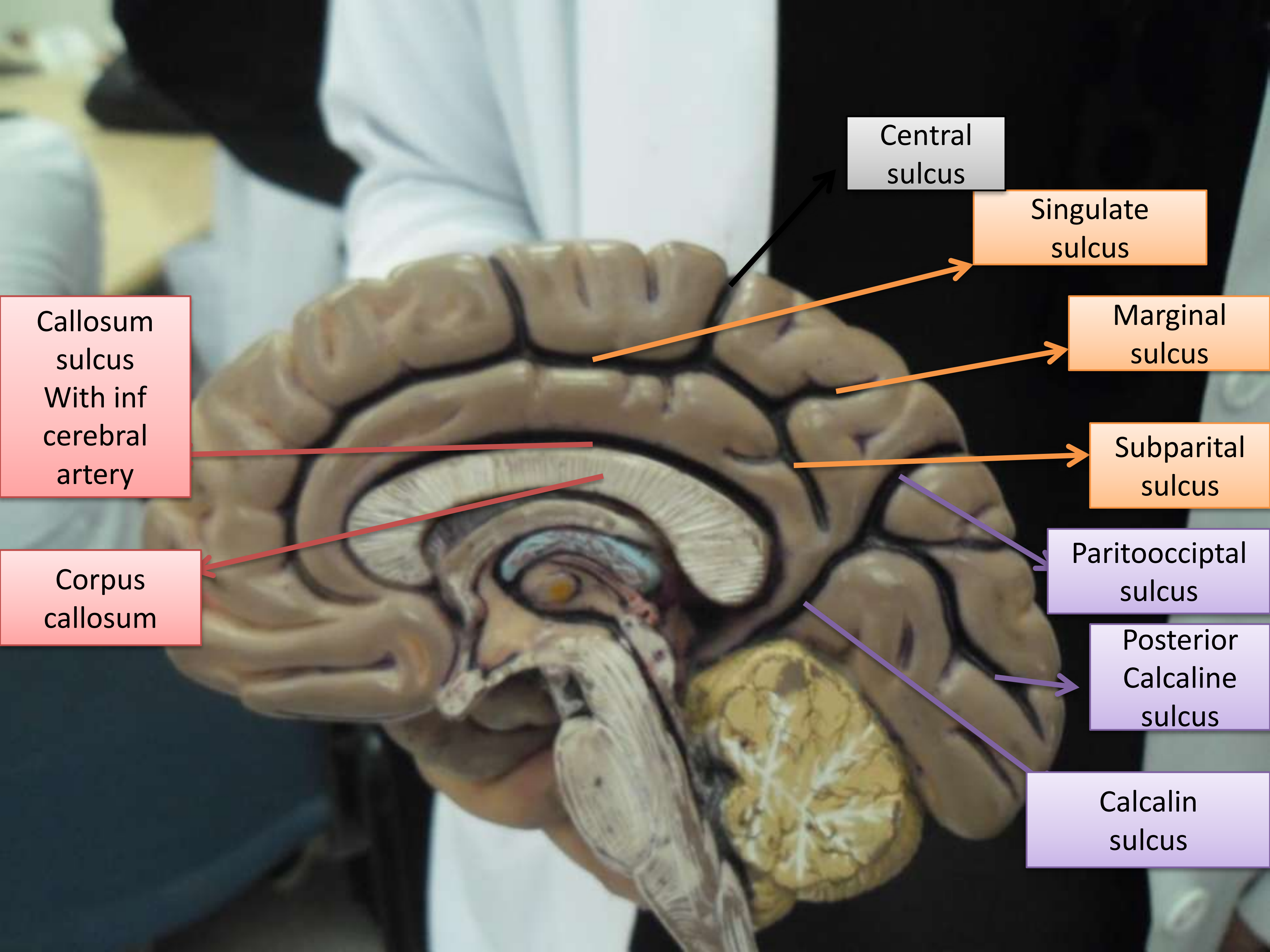
Lateral sulcus Posterior rami

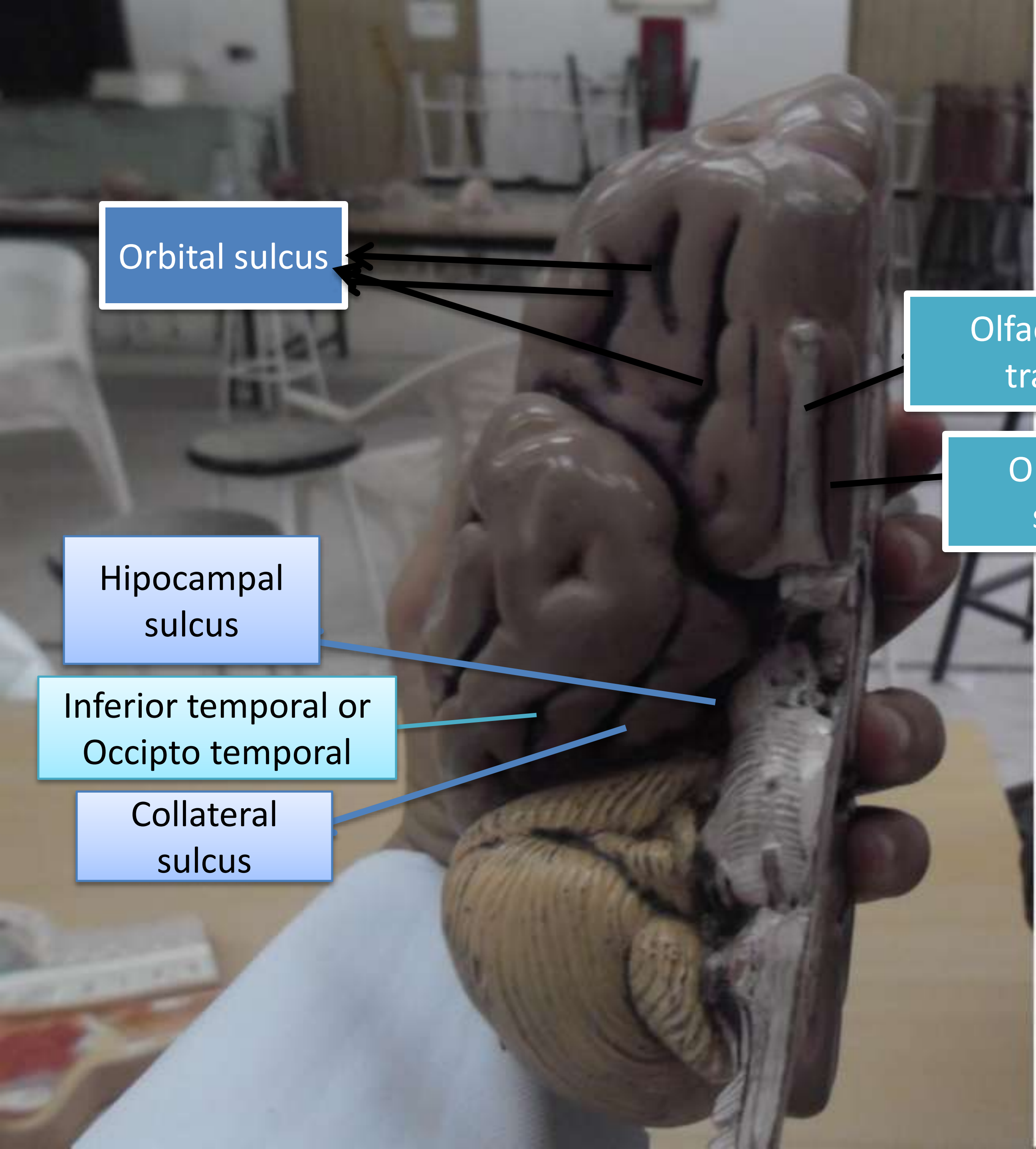
Ascending

anterior

Supratemporal sulcus

Middle temporal sulcus


Central sulcus
Singulate sulcus
Marginal sulcus
Subparital sulcus
Paritooccipital sulcus
Posterior Calcaline sulcus
Calcalin sulcus
Callosum sulcus With inf cerebral artery
Corpus callosum



Orbital sulcus

Olfactory tract

Olfactory sulcus

Hipocampal sulcus

Inferior temporal or Occipto temporal

Collateral sulcus

Inferior veiw

قد يتوقف الإنسان
في أحد منعطفات الحياة
ولكن من لديه غاية لا يتوقف أبدا
وهذا هو الذي دفع الصحابة للعمل
من أجل الفردوس الأعلى .

muslmh.com

مع تحيات اللجنة العلمية
دفعة ٢٩ طب بشري (الربيع الطبي)
٢٠١٣م - ١٤٣٤هـ